UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022

OR

□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

Commission File Number 001-37900

Everspin Technologies, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization) 26-2640654 (I.R.S. Employer Identification No.)

5670 W. Chandler Boulevard, Suite 130 Chandler, Arizona 85226

Chandler, Arizona 05220

(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: (480) 347-1111

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

Title of each class	Trading Symbol(s)	Name of the exchange on which registered
Common Stock, par value \$0.0001	MRAM	The Nasdaq Stock Market LLC

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

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES 🗆 NO 🗵

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES 🗆 NO 🗵

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

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES 🛛 NO 🗆

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

Large accelerated filer		Accelerated filer	
Non-accelerated filer	X	Smaller reporting company	X

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

Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. \Box

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

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

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES 🗆 NO 🗵

As of June 30, 2022, the last business day of the Registrant's most recently completed second fiscal quarter, the aggregate market value of the common stock of the Registrant held by nonaffiliates, based upon the closing sales price for the Registrant's common stock for such date, as quoted on the Nasdaq Global Market, was approximately \$118.4 million. Shares of common stock held by each officer, director and entities affiliated with directors have been excluded because such persons may be deemed to be "affiliates" as that term is defined under the rules and regulations of the Exchange Act. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

The number of shares of Registrant's common stock outstanding as of February 28, 2023 was 20,441,256.

DOCUMENTS INCORPORATED BY REFERENCE

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

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Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are statements of events or results that may occur in the future are deemed to be forward-looking statements. In some cases, forward-looking statements can be identified by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. These forward-looking statements include, but are not limited to, statements about:

- estimates of our future revenue, expenses, capital requirements and our needs for additional financing;
- the implementation of our business model and strategic plans for our products, technologies and businesses;
- the anticipated impacts from the novel coronavirus (COVID-19) global pandemic on the Company, including to our business, results of operations, cash flows and financial position, as well as our future responses to the COVID-19 pandemic;
- our expectations regarding current supply constraints;
- competitive companies and technologies and our industry;
- our ability to manage and grow our business by expanding our sales to existing customers or introducing our products to new customers;
- our ability to establish and maintain intellectual property (IP) protection for our products or avoid claims of infringement;
- our ability to hire and retain key personnel;
- our financial performance;
- our estimates of the MRAM market opportunity; and
- the volatility of our share price.

Forward-looking statements are based on management's current expectations, estimates, forecasts, and projections about our business and the industry in which we operate, and management's beliefs and assumptions are not guarantees of future performance or development and involve known and unknown risks, uncertainties, and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this report may turn out to be inaccurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, these statements should not be regarded as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk Factors" and elsewhere in this report. These statements, like all statements in this report, speak only as of their date, and we undertake no obligation to update or revise these statements in light of future developments. Additionally, there may be other risks that are otherwise described from time to time in the reports that we file with the Securities and Exchange Commission (SEC). We caution investors that our business and financial performance are subject to substantial risks and uncertainties. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

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

Risk Factor Summary

We are subject to a variety of risks and uncertainties, including risks related to our financial condition and our indebtedness, risks related to our business and our industry, risks related to our intellectual property and technology, risks related to regulatory matters and compliance, risks related to our common stock and certain general risks, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. These risks include, but are not limited to, the following principal risks:

- We may need additional funding and may be unable to raise capital when needed, which could force us to delay, reduce, or eliminate planned activities.
- We cannot be certain that we will sustain profitability.
- Provisions of our credit facility may restrict our ability to pursue our business strategies.
- The ongoing COVID-19 global pandemic has adversely affected, and is expected to continue to adversely affect, our business, results of operations and financial condition. The widespread outbreak of any other illnesses or communicable diseases could also adversely affect our business, results of operations and financial condition.
- The limited history of STT-MRAM adoption makes it difficult to evaluate our current business and future prospects.
- We may be unable to match production with customer demand for a variety of reasons including macroeconomic factors due to the cyclical nature of the semiconductor industry, our inability to accurately forecast customer demand, supply chain constraints, or the capacity constraints of our suppliers, which could adversely affect our operating results.
- As we expand into new potential markets, we expect to face intense competition, including from our customers and potential customers, and may not be able to compete effectively, which could harm our business.
- We rely on third parties to distribute, manufacture, package, assemble and test our products, which exposes us to a number of risks, including reduced control over manufacturing and delivery timing and potential exposure to price fluctuations, which could result in a loss of revenue or reduced profitability.
- Disruptions in our supply chain may adversely impact our ability to fulfill customer demand which, in turn, may adversely impact our business, results of operations, and financial condition.
- Our joint development agreement and strategic relationships involve numerous risks.
- We must continuously develop new and enhanced products, and if we are unable to successfully market our new and enhanced products for which we incur significant expenses to develop, our results of operations and financial condition will be materially adversely affected.
- Our success and future revenue depend on our ability to secure design wins and on our customers' ability to successfully sell the products that incorporate our solutions. Securing design wins is a lengthy, expensive, and competitive process, and may not result in actual orders and sales, which could cause our revenue to decline.
- The loss of one or several of our customers or reduced orders or pricing from existing customers may have a significant adverse effect on our operations and financial results.
- We face competition and expect competition to increase in the future. If we fail to compete effectively, our revenue growth and results of operations will be materially and adversely affected.
- Our costs may increase substantially if we or our third-party manufacturing contractors do not achieve satisfactory product yields or quality.
- The complexity of our products may lead to defects, which could negatively impact our reputation with customers and result in liability.
- We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.

- Changes to industry standards and technical requirements relevant to our products and markets could adversely affect our business, results of operations, and prospects.
- Our success depends on our ability to attract and retain key employees, and our failure to do so could harm our ability to grow our business and execute our business strategies.
- We currently maintain, and are seeking to expand, operations outside the United States which exposes us to significant risks.

For a more complete discussion of the material risk factors applicable to us, see "Risk Factors" in Part I, Item 1A of this report.

PART I

Item 1. Business.

General

Everspin is a pioneer in the successful commercialization of Magnetoresistive Random Access Memory (MRAM) technology. Our portfolio of MRAM technologies, including Toggle MRAM and Spin-transfer Torque MRAM (STT-MRAM), is delivering superior performance, persistence and reliability in non-volatile memories that transform how mission-critical data is protected against power loss. With over 15 years of MRAM technology and manufacturing leadership, our memory solutions deliver significant value to our customers in key markets such as industrial, medical, automotive/transportation, aerospace, and data center. We are the leading supplier of discrete MRAM components and a successful licensor of our broad portfolio of related technology intellectual property.

We sell our products directly and through our established distribution channels to industry-leading original equipment manufacturers (OEMs) and original design manufacturers (ODMs).

We manufacture our MRAM products using both captive and third-party manufacturing capabilities. We purchase industry-standard complementary metal-oxide semiconductor (CMOS) wafers from semiconductor foundries and perform back end of line (BEOL) processing that includes our magnetic-bit technology at our 200mm fabrication facility in Chandler, Arizona. We also manufacture full-flow 300mm CMOS wafers with our STT-MRAM magnetic-bit technology integrated in BEOL as part of our strategic relationship with GLOBALFOUNDRIES.

For the years ended December 31, 2022 and 2021, we recorded revenue of \$60.0 million and \$55.1 million, gross margin of 56.6% and 60.0%, and net income of \$6.1 million and \$4.3 million, respectively. Our headquarters is located in Chandler, Arizona. Our principal design center is in Austin, Texas, and we have additional sales operations in the Americas, Europe, and Asia-Pacific regions.

Product Overview

We have a strong track record of innovation in MRAM technology, as demonstrated by our successive introduction of MRAM products that address an increasingly broad spectrum of applications. Our MRAM discrete solutions as well as other offerings are described as follows:

Toggle MRAM

Our Toggle MRAM products have been in production since 2008 and are currently shipping in 128kb to 32Mb densities. These high performance, non-volatile memories are designed primarily to address applications in the industrial, medical, automotive/transportation, and data center markets. We offer these products with industry standard interfaces, including Parallel, Serial Peripheral Interface (SPI) and Quad SPI (QSPI) interfaces, enabling our customers to easily replace legacy memory components like Static Random Access Memory (SRAM) and Ferroelectric Random Access Memory (FRAM) with Toggle MRAM. We have never had an end-of-life event for any of our Toggle MRAM products which enables our customers to design in a product with the assurance that it will be available for many years to come.

Spin-Transfer Torque MRAM

Spin Transfer Torque MRAM (STT-MRAM) technology can be tuned to deliver products in Dynamic Random Access Memory (DRAM), SRAM and NOR Flash applications. Our STT-MRAM products targeting DRAM replacement started production in 2017 and are currently shipping in 256Mb and 1Gb densities. These high density, high performance persistent memories are delivering significant value to SSD, Persistent Memory Cards, Fabric Accelerator, and other applications in the data center market. We offer these products with DDR3 and DDR4 derivative interfaces, facilitating the replacement of battery-backed DRAM with STT-MRAM.

STT-MRAM enabled scaling of our Toggle MRAM products to higher densities on advanced CMOS nodes. In 2022, we started production of high density (8Mb to 128Mb) STT-MRAM products on 28nm CMOS node with standardized SPI, QSPI, and Octal SPI (OSPI) interfaces. These products are enabling our customers to simplify their system architecture and easily replace legacy memory components like SRAM and FRAM. They are ideal for use in electronic systems where data persistence and integrity, low power, low latency, and security are paramount, such as industrial IoT, artificial intelligence (AI), network/enterprise infrastructure, process automation and control, aeronautics/avionics, medical, and gaming.

Due to the limitations of NOR scaling past 45nm and availability of STT-MRAM on 22nm technology, we believe there is potential for STT-MRAM to enter multiple non-volatile memory (NVM) markets where fast reads/writes, high cycle counts, and extended data retention are required. We introduced the first STT-MRAM product addressing this segment of the market in 2022 and are currently shipping in 16Mb to 128Mb densities. STT-MRAM is uniquely positioned to deliver higher density (> 256Mb) monolithic parts for NOR replacement. These products are ideal for replacing NOR in Field Programmable Gate Array (FPGA) systems to store configuration memory and simultaneously enabling 100x faster Over The Air (OTA) updates. Today, no viable single chip solution exists except STT-MRAM.

Typically, on power up of a FPGA, the configuration memory that is stored off- or on- chip in a NOR chip is downloaded to the SRAM cells that execute the Look Up Tables (LUTs). This sequence of events creates a time lag between the power up and the execution of the LUTs. In addition, there is a security concern with the download of the configuration bit stream from the NOR to the SRAM. We have developed our STT-MRAM technology to act as the "configuration memory" in a FPGA eliminating the security concern and enabling instant-on characteristics. Furthermore, the STT-MRAM based configuration memory can be programmed multiple times with OTA updates or can be hard coded depending on the application. Since STT-MRAM can be scaled to advanced nodes and is already available on 22nm, monolithic embedded solutions are possible, we believe this solution is ideal for next generation FPGAs.

TMR Sensors

Our 3D Tunnel Magneto Resistance (TMR) sensors provide extremely high magnetic sensitivity in a single component that performs 3D magnetic field measurements in a monolithic solution. We offer these die-level devices to be integrated into consumer electronic applications that utilize a high sensitivity 3D compass function.

Licensing, Royalty, and Patent Overview

We leverage our broad IP portfolio to enable licensing, royalty revenue streams, and patent sales from non-core applications that can derive valuable differentiation through the use of Everspin MRAM and TMR sensor IP. For example, this includes the following:

- We have licensed GLOBALFOUNDRIES to offer embedded MRAM in the solutions they manufacture for their customers providing high-performance non-volatile embedded memory.
- We have licensed base MRAM design technology (EAR99) for use in radiation tolerant aerospace applications to customers for their custom designs.
- We have licensed TMR sensor IP in 3D magnetic field sensing.
- We have completed patent sales by transferring, assigning, and delivering patents to customers.

Foundry Services Overview

In our Chandler facility, we perform BEOL manufacturing services for customers who want to add MRAM and TMR sensor functionality to their memory or application base circuits. These services allow aerospace and satellite electronic system manufacturers to integrate our EAR99 technology that is able to withstand exposure to the levels of radiation encountered in avionics and space applications by virtue of such technology being magnetic rather than electrical charge based which would be susceptible to alpha particles.

Sales and Marketing

We sell our products through a direct sales channel and a network of representatives and distributors. The majority of our customers, and their associated contract manufacturers, buy our products through our distributors. We maintain sales, support, supply chain and logistics operations and have distributors in Asia to service the production needs of contract manufacturers. We also maintain direct selling relationships with several strategic customers. Our direct sales representatives are located in North America, Germany, Italy, Japan, Hong Kong, and Taiwan.

Our typical sales cycle consists of a sales and development process in which our field engineers and sales personnel work closely with our customers' design engineers. This process can take from three to 18 months to complete, and a successful sales cycle culminates in a design win. Note that some customers of our STT-MRAM products may need to modify their controllers to integrate our technology, adding additional time to the cycle. Once we establish a relationship with a customer, we continue a sales process to maintain our position and to secure subsequent new design wins at the customer. Each customer lead, whether new or existing, is tracked through our CRM tool and followed in stages of prospect, design in, design win and production. This tracking results in a design win pipeline that provides a measure of the future business potential of the opportunities.

We have established relationships with several storage controller and FPGA companies, including Phison Electronics, Sage Micro, and Xilinx as well as IP core companies, including Cadence and Northwest Logic, to facilitate the integration of our MRAM solutions into our customers' end products.

Our technical support personnel have expertise in hardware and software, and have access to our development team to ensure proper service and support for our OEM customers. Our field application and engineering team provides technical training and design support to our customers.

We consider our customer to be an end customer purchasing either directly from a distributor or a contract manufacturer, or a customer purchasing directly from us. An end customer purchasing through a contract manufacturer typically instructs the contract manufacturer to obtain our products and to incorporate our products with other components for sale by the contract manufacturer to the end customer. Although we actually sell the products to, and are paid by, the distributors and contract manufacturers, we refer to the end customer as our customer.

During the year ended December 31, 2022, more than 1,300 end customers purchased our products. Our four largest end customers together accounted for 24% of our total revenue for the year ended December 31, 2022, and one of these customers accounted for more than 10% of our revenue during that period. Our four largest end customers together accounted for 47% of our total revenue for the year ended December 31, 2021, and one of these customers individually accounted for more than 10% of our total revenue during the period.

Manufacturing

We rely on third-party suppliers for most phases of the manufacturing process, including initial fabrication, final test, and assembly.

Wafer Manufacturing

We perform BEOL manufacturing for our Toggle MRAM products and provide foundry services for licensed MRAM products and Magnetic Tunnel Junction (MTJ)-based sensors in our 200mm manufacturing facility. Our facility is in an ISO-4 clean room and our manufacturing line is ISO 9001:2015 certified. We actively manage inventory, including automated process flows, process controls and recipe management, and we use standard equipment to manufacture our products.

Our STT-MRAM products are produced in 300mm fabrication facilities operated by GLOBALFOUNDRIES.

Assembly and Test

Our product and test engineering teams develop and implement wafer-level and final test programs for the manufacture of our MRAM devices.

We utilize third-party industry-leading assembly and test sub-contractors, including Amkor, OSE, GTC, ChipMos and UTAC. We have successfully qualified our MRAM devices in various packages at temperatures ranging from commercial to automotive grade. As part of our commitment to quality, our quality management system has been certified to ISO 9001:2015 and ISO 14001:2015 standards. Our foundry vendors and sub-contractors are also ISO 9001 and ISO 14001 certified.

Arrangements with GLOBALFOUNDRIES

Joint Development Agreement

Since October 17, 2014, we have participated in a joint development agreement with GLOBALFOUNDRIES Inc., a semiconductor foundry, for the joint development of STT-MRAM technology to produce a family of discrete and embedded MRAM technologies. The term of the agreement is until the completion, termination, or expiration of the last statement of work entered into pursuant to the joint development agreement. The agreement was extended on December 31, 2019 to include a new phase of support for 12nm MRAM development.

The joint development agreement also states that the specific terms and conditions for the production and supply of the developed MRAM technology would be pursuant to a separate manufacturing agreement entered into between the parties. See "Manufacturing Agreement" below.

Under the joint development agreement, each party granted licenses to its relevant intellectual property to the other party. For certain jointly developed works, the parties have agreed to follow an invention allocation procedure to determine ownership. In addition, GLOBALFOUNDRIES possesses the exclusive right to manufacture our discrete and embedded STT-MRAM devices developed pursuant to the agreement until the earlier of three years after the qualification of the MRAM device for a particular technology node or four years after the completion of the relevant statement of work under which the device was developed. For the same exclusivity period associated with the relevant device, GLOBALFOUNDRIES agreed not to license intellectual property developed in connection with the agreement to named competitors of ours.

If GLOBALFOUNDRIES manufactures, sells, or transfers wafers containing production qualified MRAM devices that utilized certain Everspin design information to its customers, GLOBALFOUNDRIES will pay royalties to us for each such wafer transferred or sold to a customer.

Except for breaches of confidentiality provisions and each party's indemnification obligations to one another under the agreement, liability under the agreement is capped at a range depending on project costs and royalty amounts. Either party may terminate the agreement if the other party materially breaches a term of the agreement, and fails to remedy the breach after receiving notice from the non-breaching party. If a party terminates the manufacturing agreement for material breach in accordance with its terms, that party may also terminate the joint development agreement.

See "Risk Factors" for further discussion of our agreements with GLOBALFOUNDRIES.

Manufacturing Agreement

On October 23, 2014, we entered into a manufacturing agreement with GLOBALFOUNDRIES Singapore Pte. Ltd. that sets forth the specific terms and conditions for the production and supply of wafers manufactured using our STT-MRAM technology developed under the joint development agreement with GLOBALFOUNDRIES. Pursuant to that joint development agreement, GLOBALFOUNDRIES possesses certain exclusive rights to manufacture such wafers for our discrete and embedded STT-MRAM devices. Our manufacturing agreement with GLOBALFOUNDRIES includes a customary forecast and ordering mechanism for the supply of certain of our wafers, and we are obligated to order and pay for, and GLOBALFOUNDRIES is obligated to supply, wafers consistent with the binding portion of our forecast.

GLOBALFOUNDRIES also has the ability to discontinue its manufacture of any of our wafers upon due notice and completion of the notice period. The initial term of the manufacturing agreement is for three years, which automatically renews for successive one year periods thereafter unless either party provides sufficient advance notice of non-renewal.

Except for breaches of confidentiality provisions and each party's indemnification obligations to one another under the agreement, liability under the agreement is capped at the lesser of a set amount or the total purchase price received by GLOBALFOUNDRIES from us in the 12 months immediately preceding the claim for the specific product that caused the damages. Either party may terminate the agreement if the other party materially breaches a term of the agreement, and fails to remedy the breach after receiving notice from the non-breaching party. GLOBALFOUNDRIES may terminate the agreement if we fail to pay any undisputed sum which has been outstanding for sixty or more days from the date of invoice.

Product Warranty

Because the design and manufacturing process for semiconductor products is highly complex, it is possible that we may produce products that do not comply with applicable specifications, contain defects, or are otherwise incompatible with end uses. In accordance with industry practice, we generally provide a limited warranty that our products are in compliance with applicable specifications existing at the time of delivery and will operate to those specifications during a stated warranty period. Under our standard terms and conditions of sale, liability for certain failures of product during a stated warranty period is usually limited to repair or replacement of defective items or return of, or a credit with respect to, amounts paid for such items. Under certain circumstances, we provide more extensive limited warranty coverage than that provided under our standard terms and conditions.

Competition

As an emerging specialty memory product supplier, we face intense competition from a wide variety of other memory technology manufacturers.

Our principal competitors to our Toggle MRAM products include companies that offer nonvolatile SRAM (NVSRAM), SRAM, and FRAM products, such as Infineon, Fujitsu, Integrated Silicon Solution (ISSI), Macronix, Microchip, Micron, Renesas, Samsung and Toshiba. Our STT-MRAM products replace discrete NOR, DRAM and SRAM where persistence is required and thus compete with DRAM and SRAM suppliers such as Hynix, Micron, Winbond, Samsung, and several other smaller companies. In the future we may also face competition from companies developing MRAM technologies, such as Avalanche, Samsung and other larger and smaller semiconductor companies. We may also face indirect competition from resistive random-access memory (RRAM), NOR and NAND Flash manufacturers in some market applications.

Our ability to compete successfully in the market for our products is based on a number of factors, including:

- our products' attributes and specifications;
- customer adoption of MRAM technology despite the price per bit premium of our products versus competing technologies;
- successful controller supplier and customer engagements throughout the product life cycle;
- high quality and reliability as measured by our customers;
- the ease of implementation of our products by customers;
- preferred supplier status at numerous customers and ODMs;
- manufacturing expertise and strength;
- product manufacturing yield analysis and testing;
- manufacturing capacity and allocation;
- reputation and strength of customer relationships;
- competitive pricing in the market against the competition while maintaining our gross margin profile; and

• our success in meeting the needs of future customer requirements through continued development of new products.

Intellectual Property

Our success depends, in part, on our ability to protect our products and technologies from unauthorized third-party copying and use. To accomplish this, we rely on a combination of intellectual property rights, including patents, trade secrets, copyrights, and trademarks, as well as customary contractual protections. As of December 31, 2022, we held 520 issued patents that expire at various times between February 2023 and October 2042 and had 146 patent applications pending. Included in our issued patents and pending applications are patents/applications in the United States, China, Europe, France, Germany, Ireland, Italy, Japan, the Netherlands, the Republic of Korea, Singapore, Taiwan, and the United Kingdom.

We seek to file for patents that have broad application in the semiconductor industry and that would be helpful in the magnetoresistive memory and sensor markets. However, there can be no assurance that our pending patent applications or any future applications will be approved, that any issued patents will provide us with competitive advantages or will not be challenged by third parties, or that the patents or applications of others will not have an adverse effect on our ability to do business. In addition, there can be no assurance that others will not independently develop substantially equivalent intellectual property or otherwise gain access to our trade secrets or intellectual property, or disclose such intellectual property or trade secrets, or that we can effectively protect our intellectual property.

We seek to enforce our IP and to monetize our patent portfolio through licensing of third parties and patent sales in return for cash remuneration, patent cross licenses or both. See "Licensing, Royalty, and Patent Overview" for additional information.

We generally control access to and use of our confidential information through employing internal and external controls, including contractual protections with employees, contractors, and customers. We rely in part on U.S. and international copyright laws to protect our intellectual property. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

Environmental Regulation

We must comply with many different federal, state, local and foreign governmental regulations related to the use, storage, discharge and disposal of certain chemicals and gases used in our manufacturing processes. Our facilities have been designed to comply with these regulations and we believe that our activities are conducted in material compliance with such regulations. Any changes in such regulations or in their enforcement could require us to acquire costly equipment or to incur other significant expenses to comply with environmental regulations. Any failure by us to adequately control the storage, use, discharge, and disposal of regulated substances could result in significant future liabilities.

Employees

As of December 31, 2022, we had 74 total employees in the United States, all of which were full-time employees, and 15 full-time equivalent and 3 part-time equivalent contractors and consultants in China, Germany, Italy, Japan, Malaysia, Singapore, and Taiwan. None of our employees are either represented by a labor union or subject to a collective bargaining agreement. We have not experienced any work stoppages, and we consider our relations with our employees and contractors to be good.

Corporate Information

We were incorporated in Delaware in May 2008. In June 2008, Freescale Semiconductor, Inc. (now a wholly-owned subsidiary of NXP Semiconductors N.V.), spun-out its MRAM business as Everspin. Our offices are located at 5670 W. Chandler Boulevard, Suite 130, Chandler, Arizona 85226. Our telephone number is (480) 347-1111. Our corporate website is at *www.Everspin.com*.

Available Information

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (Exchange Act), are available free of charge on our website, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. The information contained on or that can be accessed through our website is not incorporated by reference into this report, and information on our website should not be considered to be part of this report.

Item 1A. Risk Factors.

The following are important factors that could cause actual results or events to differ materially from those contained in any forward-looking statements made by us or on our behalf. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we deem immaterial also may impair our business operations. If any of the following risks or such other risks actually occurs, our business, financial condition, results of operations and cash flows could be harmed. In addition, many of the following risks and uncertainties may be exacerbated by the ongoing COVID-19 pandemic, including any new variants that may become predominant, and any worsening of the global business and economic environment as a result.

Risk Factors Related to Our Financial Condition and Our Indebtedness

We may need additional funding and may be unable to raise capital when needed, which could force us to delay, reduce, or eliminate planned activities.

Our total revenue was approximately \$60.0 million for the year ended December 31, 2022, and \$55.1 million for the year ended December 31, 2021. As of December 31, 2022, we had cash and cash equivalents of approximately \$26.8 million. Based on our current operating plan, we believe our existing cash and cash equivalents, coupled with availability under our credit facility and our anticipated growth and sales levels, will be sufficient to meet our anticipated cash requirements for at least the next 12 months. However, our existing capital may be insufficient to meet our long-term requirements. We have no committed sources of funding other than our revolving line of credit facility and there is no assurance that additional funding will be available to us in the future or be secured on acceptable terms. If adequate funding is not available when needed, we may be forced to curtail operations, including our commercial activities and research and development programs, or cease operations altogether, file for bankruptcy, or undertake any combination of the foregoing. In such event, our stockholders may lose their entire investment in our company.

Further, we may need to raise additional funds through financing or borrowings in order to accomplish our longterm planned objectives. If we raise additional funds through issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences, and privileges senior to those of holders of our common stock.

In addition, if we do not meet our payment obligations to third parties as they become due, we may be subject to litigation claims and our creditworthiness would be adversely affected. Even if we are successful in defending against these claims, litigation could result in substantial costs and would be a distraction to management, and may have other unfavorable results that could further adversely impact our financial condition. Stockholders should not rely on our balance sheet as an indication of the amount of proceeds that would be available to satisfy claims of creditors, and potentially be available for distribution to stockholders, in the event of liquidation.

We cannot be certain that we will sustain profitability.

While our products offer unique benefits over other industry memory technologies, the rate of adoption of our products and our ability to capture market share from legacy technologies is uncertain. Our revenue may also be adversely impacted by a number of other possible reasons, many of which are outside our control, including business conditions that adversely affect the semiconductor memory industry resulting in a decline in end market demand for our products, adverse impacts resulting from the COVID-19 pandemic, increased competition, ongoing supply chain constraints, or our failure to capitalize on growth opportunities. We also rely on achieving specific cost reduction targets

that have uncertainty in their timing and magnitude. We may also incur unforeseen expenses in the ongoing operation of our business that cause us to exceed our operational spending plan. As a result, our ability to generate sufficient revenue growth and/or control expenses to transition to profitability and generate consistent positive cash flows is uncertain.

Provisions of our credit facility may restrict our ability to pursue our business strategies.

Borrowings under our existing credit facility are secured by substantially all of our assets, except for intellectual property. Additionally, the operating restrictions and covenants relating to our existing credit facility restrict, and any future financing agreements that we may enter into may further restrict, our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. For example, our existing credit facility prohibits our ability to, among other things:

- dispose of or sell assets;
- consolidate or merge with other entities;
- incur additional indebtedness;
- create liens on our assets;
- pay dividends;
- make investments;
- enter into transactions with affiliates; and
- redeem subordinated indebtedness.

These restrictions are subject to certain exceptions. In addition, our existing credit facility requires that we meet certain operating covenants, such as maintaining insurance on the collateral and meeting certain financial covenants, such as maintaining a minimum cash balance and availability under our revolving line of credit facility. Our ability to comply with these covenants may be affected by events beyond our control, and we may not be able to meet those covenants. A breach of any of these covenants could result in an event of default under the credit facility. We are required to make mandatory prepayments of the outstanding loan upon the acceleration by lender following the occurrence of an event of default, along with a payment of the end of term fee, the prepayment fee and any other obligations that are due and payable at the time of prepayment. In the event of default, the interest rate in effect will increase by 5.0% per annum.

Risk Factors Related to Our Business and Our Industry

The ongoing COVID-19 global pandemic has adversely affected, and is expected to continue to adversely affect, our business, results of operations and financial condition. The widespread outbreak of any other illnesses or communicable diseases could also adversely affect our business, results of operations and financial condition.

We could be negatively impacted by the widespread outbreak of an illness, any other communicable disease or any other public health crisis that results in economic and trade disruptions, including the disruption of global supply chains. More recently, new variants of COVID-19 have emerged. The spread of these new strains caused many government authorities and businesses to implement measures to try to reduce the spread that had become less prevalent. While some of these restrictions have begun to be lifted, the lingering impact of the COVID-19 pandemic continues to create significant volatility throughout the global economy, including supply chain constraints, labor supply issues, and higher inflation. Accordingly, it is unclear at this point the full impact COVID-19 and its variants will have on the global economy and on our Company.

As a result of the COVID-19 pandemic and the related responses from government authorities, our business, results of operations and financial condition have been adversely impacted. For example, we have experienced electronics supply chain and demand disruptions from extended factory shutdowns, particularly in some Asian countries, which

created unusual order patterns, and subsequently slowed Toggle MRAM demand, particularly from our industrial customers. Further, in an effort to protect the health and safety of our employees, we took the following actions: transitioned most of our office and support employees and contractors to working from home; suspended all non-essential business travel; and implemented social distancing guidelines for our employees and contractors who must work in our manufacturing and laboratory locations.

Additionally, our business, results of operations and financial condition have been and may be further impacted in several ways, including, but not limited to, the following:

- further disruptions to our operations, including due to additional facility closures, restrictions on our operations and sales, marketing and distribution efforts and/or interruptions to our research and development activities, product development and other important business activities;
- further reduced demand for our products, particularly due to disruptions to the businesses and operations of our customers;
- interruptions, availability or delays in global shipping to transport our products;
- further slowdowns, stoppages or other limitations in the supply chain for our products, in addition to higher costs, such as due to suppliers raising prices;
- limitations on employee resources and availability, including due to sickness, government restrictions, labor supply shortages, and the desire of employees to avoid contact with large groups of people or mass transit disruptions;
- a continuation or worsening of general economic conditions, including increased inflation;
- greater difficulty in collecting customer receivables;
- a fluctuation in foreign currency exchange rates or interest rates could result from market uncertainties; and
- an increase in the cost or the difficulty to obtain debt or equity financing could affect our financial condition or our ability to fund operations or future investment opportunities.

Additionally, COVID-19 could impact our internal controls over financial reporting as a portion of our workforce is required to work from home and therefore new processes, procedures, and controls could be required to respond to changes in our business environment. Further, should any key employees become ill from COVID-19 and unable to work, the attention of the management team could be diverted.

The emergence of different variants of COVID-19 and the prevalence of breakthrough cases of infection among fully vaccinated people adds additional uncertainty and could result in further impacts to our business and operations, including those discussed above.

Although we will continue to monitor the situation and take further actions, which may include further altering our operations, in order to protect the best interests of our employees, customers and suppliers and comply with government requirements, there is no certainty that such measures will be enough to mitigate the risks posed by the virus, and our ability to perform critical functions could be harmed.

Any of the foregoing could adversely affect our business, results of operations and financial condition. The potential effects of COVID-19 may also impact many of our other risk factors discussed in this "Risk Factors" section. The ultimate extent of the impact of the COVID-19 pandemic on our business, results of operations and financial condition will depend on future developments, which are highly uncertain, continuously evolving and cannot be predicted, including, but not limited to the duration and spread of the COVID-19 outbreak and its severity; the emergence and severity of its variants; the actions to contain the virus or treat its impact, such as the availability and efficacy of vaccines (particularly with respect to emerging strains of the virus) and potential hesitancy to use them; general economic factors, such as increased inflation; supply chain restraints; labor supply issues; and how quickly and to what extent normal economic and operating conditions can resume.

The limited history of STT-MRAM adoption makes it difficult to evaluate our current business and future prospects.

We have been in existence as a stand-alone company since 2008, when Freescale Semiconductor, Inc. (subsequently acquired by NXP Semiconductor) spun-out its MRAM business as Everspin. We have been shipping magnetoresistive random-access memory (MRAM) products since our incorporation in 2008. However, we only began to manufacture and ship our Spin Transfer Torque MRAM (STT-MRAM) products in the fourth quarter of 2017.

Our limited experience selling our STT-MRAM products, combined with the rapidly evolving and competitive nature of our market, makes it difficult to evaluate our current business and future prospects. In addition, we have limited insight into emerging trends that may adversely affect our business, financial condition, results of operations and prospects. We have encountered and will continue to encounter risks and difficulties frequently experienced by growing companies in rapidly changing industries, including unpredictable and volatile revenue and increased expenses as we continue to grow our business. The viability and demand for our products may be affected by many factors outside of our control, such as the factors affecting the growth of the industrial, automotive, transportation, and data center market segments and changes in macroeconomic conditions. If we do not manage these risks and overcome these difficulties successfully, our business will suffer.

We may be unable to match production with customer demand for a variety of reasons including macroeconomic factors due to the cyclical nature of the semiconductor industry, our inability to accurately forecast customer demand, supply chain constraints, or the capacity constraints of our suppliers, which could adversely affect our operating results.

We make planning and spending decisions, including determining production levels, production schedules, component procurement commitments, personnel needs, and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are not contractually committed to buy any quantity of products beyond purchase orders. Furthermore, many of our customers may increase, decrease, cancel, or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, necessitate more onerous procurement commitments, and reduce our gross margin. If we overestimate customer demand, we may purchase products that we may not be able to sell, which could result in decreases in our prices or write-downs of unsold inventory. Conversely, we could lose sales opportunities and could lose market share or damage our customer relationships if, for example, we underestimate customer demand, are affected by supply chain constraints, or sufficient manufacturing is unavailable. We manufacture MRAM products at our 200mm facility we lease in Chandler, Arizona and use a single foundry, GLOBALFOUNDRIES, for production of higher density products on advanced technology nodes, which may not have sufficient capacity to meet customer demand. The rapid pace of innovation in our industry could also render significant portions of our inventory obsolete. Excess or obsolete inventory levels could result in unexpected expenses or write-downs of inventory values that could adversely affect our business, operating results, and financial condition.

As we expand into new potential markets, we expect to face intense competition, including from our customers and potential customers, and may not be able to compete effectively, which could harm our business.

We expect that our new and future MRAM products will be applicable to markets in which we are not currently operating. The markets in which we operate and may operate in the future are extremely competitive and are characterized by rapid technological change, continuous evolving customer requirements and declining average selling prices. We may not be able to compete successfully against current or potential competitors, which include our current or potential customers as they seek to internally develop solutions competitive with ours or as we develop products potentially competitive with their existing products. If we do not compete successfully, our market share and revenue may decline. We compete with large semiconductor manufacturers and designers and others, and our current and potential competitors have longer operating histories, significantly greater resources and name recognition and a larger base of customers than we do. This may allow them to respond more quickly than we can to new or emerging technologies or changes in customer requirements. In addition, these competitors may have greater credibility with our existing and potential customers. Some of our current and potential customers with their own internally developed solutions may choose not to purchase products from third-party suppliers like us.

We rely on third parties to distribute, manufacture, package, assemble and test our products, which exposes us to a number of risks, including reduced control over manufacturing and delivery timing and potential exposure to price fluctuations, which could result in a loss of revenue or reduced profitability.

Although we operate an integrated magnetic fabrication line located in Chandler, Arizona, we purchase wafers from third parties and outsource the manufacturing, packaging, assembly and testing of our products to third-party foundries and assembly and testing service providers. We use a single foundry, GLOBALFOUNDRIES Singapore Pte. Ltd., for production of higher density products on advanced technology nodes. Our primary product package and test operations are located in China, Taiwan and other Asian countries. We also use standard CMOS wafers from third-party foundries, which we process at our Chandler, Arizona facility.

Relying on third-party distribution, manufacturing, assembly, packaging, and testing presents a number of risks, including but not limited to:

- our interests could diverge from those of our foundries, or we may not be able to agree with them on ongoing development, manufacturing and operational activities, or on the amount, timing, or nature of further investments in our joint development;
- capacity and materials shortages during periods of high demand or supply constraints;
- reduced control over delivery schedules, inventories and quality;
- the unavailability of, or potential delays in obtaining access to, key process technologies;
- the inability to achieve required production or test capacity and acceptable yields on a timely basis;
- misappropriation of our intellectual property;
- the third party's ability to perform its obligations due to bankruptcy or other financial constraints;
- exclusive representatives for certain customer engagements;
- limited warranties on wafers or products supplied to us; and
- potential increases in prices including due to inflation.

Our manufacturing agreement with GLOBALFOUNDRIES includes a customary forecast and ordering mechanism for the supply of certain of our wafers, and we are obligated to order and pay for, and GLOBALFOUNDRIES is obligated to supply, wafers consistent with the binding portion of our forecast. However, our manufacturing arrangement is also subject to both a minimum and maximum order quantity that while we believe currently addresses our projected foundry capacity needs, may not address our maximum foundry capacity requirements in the future. We may also be obligated to pay for unused capacity if our demand decreases in the future, or if our estimates prove inaccurate. GLOBALFOUNDRIES also has the ability to discontinue its manufacture of any of our wafers upon due notice and completion of the notice period. This could cause us to have to find another foundry to manufacture those wafers or redesign our core technology and would mean that we may not have products to sell until such time. Any time spent engaging a new manufacturer or redesigning our core technology could be costly and time consuming and may allow potential competitors to take opportunities in the marketplace. Moreover, if we are unable to find another foundry to manufacture our products or if we have to redesign our core technology, this could cause material harm to our business and operating results.

If we need other foundries or packaging, assembly, and testing contractors, or if we are unable to obtain timely and adequate deliveries from our providers, we might not be able to cost-effectively and quickly retain other vendors to satisfy our requirements. Because the lead time needed to establish a relationship with a new third-party supplier could be several quarters, there is no readily available alternative source of supply for any specific component. In addition, the time and expense to qualify a new foundry could result in additional expense, diversion of resources or lost sales, any of which would negatively impact our financial results.

If any of our current or future foundries or packaging, assembly and testing subcontractors significantly increases the costs of wafers or other materials or services, interrupts or reduces our supply, including for reasons outside of their control, such as due to the COVID-19 pandemic, or if any of our relationships with our suppliers is terminated, our operating results could be adversely affected. Such occurrences could also damage our customer relationships, result in lost revenue, cause a loss in market share, or damage our reputation.

Disruptions in our supply chain and increased cost of components used in our products may adversely impact our business, results of operations and financial condition, including our ability to fulfill customer demand.

If we fail to procure sufficient components used in our products, we may be unable to deliver our products to our customers on a timely basis, which could lead to customer dissatisfaction and could harm our reputation and ability to compete. We would likely experience significant delays or cessation in producing some of our products if a labor strike, natural disaster, public health crisis, geopolitical event, or other supply disruption were to occur, including as a result of the COVID-19 pandemic or the military conflict in Ukraine, at any of our main suppliers.

Further, the upturn in the semiconductor industry has stretched the supply chain, and we are subject to supply shortages, as well as higher costs as suppliers opportunistically raise prices. For example, there is currently a worldwide shortage of semiconductor, memory and other electronic components affecting many industries. Our products are dependent on some of these electronic components. A continued shortage of electronic components may impact us significantly and could cause us to experience extended lead times and increased prices from our suppliers, which could be significant. Extended lead times and decreased availability of key components could result in a significant disruption to our production schedule, all of which would have an adverse effect on our business, results of operations and financial condition. Additionally, the military conflict in Ukraine creates additional uncertainty and risks relating to our supply chain and the cost of components. See "—General Risk Factors—Unfavorable economic, market and geopolitical conditions, domestically and internationally, may adversely affect our business, financial condition, results of operations and cash flows" for additional information.

We do not have any guarantees of supply from our third-party suppliers, and in certain cases we have limited contractual arrangements or are relying on standard purchase orders or on component parts available on the open market, which may further result in increased costs combined with reduced availability. A continued delay in our ability to produce and deliver our products could also cause our customers to purchase alternative products from our competitors and/or harm our reputation.

Our joint development agreement and strategic relationships involve numerous risks.

We have entered into strategic relationships to manufacture products and develop new manufacturing process technologies and products. These relationships include our joint development agreement with GLOBALFOUNDRIES to develop advanced MTJ technology and STT-MRAM. These relationships are subject to various risks that could adversely affect the value of our investments and our results of operations. These risks include the following:

- our interests could diverge from those of our foundries, or we may not be able to agree with them on ongoing development, manufacturing and operational activities, or on the amount, timing, or nature of further investments in our joint development;
- we may experience difficulties in transferring technology to a foundry;
- we may experience difficulties and delays in getting to and/or ramping production at foundries;
- our control over the operations of foundries is limited;
- due to financial constraints, our joint development collaborators may be unable to meet their commitments to us and may pose credit risks for our transactions with them;
- due to differing business models or long-term business goals, our collaborators may decide not to join us in funding capital investment, which may result in higher levels of cash expenditures by us;

- our cash flows may be inadequate to fund increased capital requirements;
- we may experience difficulties or delays in collecting amounts due to us from our collaborators;
- the terms of our arrangements may turn out to be unfavorable;
- we are migrating toward a fabless model as 300mm production becomes required and this increases risks related to less control over our critical production processes; and
- changes in tax, legal, or regulatory requirements may necessitate changes in our agreements.

The term of the agreement, as amended, is the completion, termination, or expiration of the last statement of work entered into pursuant to the joint development agreement.

If our strategic relationships are unsuccessful, our business, results of operations, or financial condition may be materially adversely affected.

We must continuously develop new and enhanced products, and if we are unable to successfully market our new and enhanced products for which we incur significant expenses to develop, our results of operations and financial condition will be materially adversely affected.

To compete effectively in our markets, we must continually design, develop, and introduce new and improved technology and products with improved features in a cost-effective manner in response to changing technologies and market demand. This requires us to devote substantial financial and other resources to research and development. We are developing new technology and products, which we expect to be one of the drivers of our revenue growth in the future. We also face the risk that customers may not value or be willing to bear the cost of incorporating our new and enhanced products into their products, particularly if they believe their customers are satisfied with current solutions. Regardless of the improved features or superior performance of our new and enhanced products, customers may be unwilling to adopt our solutions due to design or pricing constraints, or because they do not want to rely on a single or limited supply source. Because of the extensive time and resources that we invest in developing new and enhanced products, if we are unable to sell customers our new products, our revenue could decline and our business, financial condition, results of operations and cash flows would be negatively affected. For example, if we are unable to generate more customer adoption of our 1Gb product and address new growth opportunities with subsequent STT-MRAM products, we may not be able to materially increase our revenue. If we are unable to successfully develop and market our new and enhanced products that we have incurred significant expenses developing, our results of operations and financial condition will be materially and adversely affected.

Our success and future revenue depend on our ability to secure design wins and on our customers' ability to successfully sell the products that incorporate our solutions. Securing design wins is a lengthy, expensive, and competitive process, and may not result in actual orders and sales, which could cause our revenue to decline.

We sell to customers, including OEMs and ODMs, that incorporate MRAM into their products. A design win occurs after a customer has tested our product, verified that it meets the customer's requirements and qualified our solutions for their products. We believe we are dependent, among other things, on the adoption of our 256Mb and 1Gb MRAM products by our customers to secure design wins. Our customers may need several months to years to test, evaluate, and adopt our product and additional time to begin volume production of the product that incorporates our solution. Due to this generally lengthy design cycle, we may experience significant delays from the time we increase our operating expenses and make investments in our products to the time that we generate revenue from sales of these products, as the customer may ultimately change or cancel its product plans, or efforts by our customer to market and sell its product may not be successful. We may not generate any revenue from design wins after incurring the associated costs, which would cause our business and operating results to suffer.

If a current or prospective customer incorporates a competitor's solution into its product, it becomes significantly more difficult for us to sell our solutions to that customer because changing suppliers involves significant time, cost, effort, and risk for the customer even if our solutions are superior to other solutions and remain compatible with their product design. Our ability to compete successfully depends on customers viewing us as a stable and reliable supplier to

mission-critical customer applications when we have less production capacity and less financial resources compared to most of our larger competitors. If current or prospective customers do not include our solutions in their products and we fail to achieve a sufficient number of design wins, our results of operations and business may be harmed.

The loss of one or several of our customers or reduced orders or pricing from existing customers may have a significant adverse effect on our operations and financial results.

We have derived and expect to continue to derive a significant portion of our revenues from a small group of customers during any particular period due in part to the concentration of market share in the semiconductor industry. Our four largest end customers together accounted for 24% of our total revenue for the year ended December 31, 2022, and one of these customers accounted for more than 10% of our revenue during that period. Our four largest end customers together accounted for total revenue for the year ended December 31, 2021, and one of these customers individually accounted for more than 10% of our total revenue during the period. The loss of a significant customer, a business combination among our customers, a reduction in orders or decrease in price from a significant customer or disruption in any of our commercial or distributor arrangements may result in a significant decline in our revenues and could have a material adverse effect on our business, liquidity, results of operations, financial condition, and cash flows.

We face competition and expect competition to increase in the future. If we fail to compete effectively, our revenue growth and results of operations will be materially and adversely affected.

The global semiconductor market in general, and the semiconductor memory market in particular, are highly competitive. We expect competition to increase and intensify as other semiconductor companies enter our markets, many of which have greater financial and other resources with which to pursue technology development, product design, manufacturing, marketing and sales and distribution of their products. Increased competition could result in price pressure, reduced revenue, and profitability and loss of market share, any of which could materially and adversely affect our business, revenue, and operating results. Currently, our competitors range from large, international companies offering a wide range of traditional memory technologies to companies specializing in other alternative, specialized emerging memory technologies. Our primary memory competitors include Fujitsu, Infineon, Integrated Silicon Solution, Intel, Macronix, Microchip, Micron, Renesas, Samsung, and Toshiba. In addition, as the MRAM market opportunity grows, we expect new entrants may enter this market and existing competitors, including leading semiconductor companies, may make significant investments to compete more effectively against our products. These competitors could develop technologies or architectures that make our products or technologies obsolete.

Our ability to compete successfully depends on factors both within and outside of our control, including:

- the functionality and performance of our products and those of our competitors;
- our relationships with our customers and other industry participants;
- prices of our products and prices of our competitors' products;
- our ability to develop innovative products;
- our competitors' greater resources to make acquisitions;
- our ability to obtain adequate capital to finance operations;
- our ability to retain high-level talent, including our management team and engineers; and
- the actions of our competitors, including merger and acquisition activity, launches of new products and other actions that could change the competitive landscape.

In the event of a market downturn, competition in the markets in which we operate may intensify as our customers reduce their purchase orders. Our competitors that are significantly larger and have greater financial, technical, marketing, distribution, customer support and other resources or more established market recognition than us may be better positioned to accept lower prices and withstand adverse economic or market conditions.

Our costs may increase substantially if we or our third-party manufacturing contractors do not achieve satisfactory product yields or quality.

The fabrication process is extremely complicated and small changes in design, specifications or materials can result in material decreases in product yields or even the suspension of production. From time to time, we and/or the thirdparty foundries that we contract to manufacture our products may experience manufacturing defects and reduced manufacturing yields. In some cases, we and/or our third-party foundries may not be able to detect these defects early in the fabrication process or determine the cause of such defects in a timely manner. There may be a higher risk of product yield issues in newer STT-MRAM products.

Generally, in pricing our products, we assume that manufacturing yields will continue to improve, even as the complexity of our products increases. Once our products are initially qualified either internally or with our third-party foundries, minimum acceptable yields are established. We are responsible for the costs of the units if the actual yield is above the minimum set with our third-party foundries. If actual yields are below the minimum, we are not required to purchase the units. Typically, minimum acceptable yields for our new products are generally lower at first and gradually improve as we achieve full production, but yield issues can occur even in mature processes due to break downs in mechanical systems, equipment failures or calibration errors. Unacceptably low product yields or other product manufacturing problems could substantially increase overall production time and costs and adversely impact our operating results. Product yield losses may also increase our costs and reduce our gross margin. In addition to significantly harming our results of operations and cash flow, poor yields may delay shipment of our products and harm our relationships with existing and potential customers.

The complexity of our products may lead to defects, which could negatively impact our reputation with customers and result in liability.

Products as complex as ours may contain defects when first introduced to customers or as new versions are released. Delivery of products with production defects or reliability, quality or compatibility problems could significantly delay or hinder market acceptance of the products or result in a costly recall and could damage our reputation and adversely affect our ability to retain existing customers and attract new customers. Defects could cause problems with the functionality of our products, resulting in interruptions, delays, or cessation of sales of these products to our customers. We may also be required to make significant expenditures of capital and resources to resolve such problems. We cannot assure our stockholders that problems will not be found in new products, both before and after commencement of commercial production, despite testing by us, our suppliers, or our customers. For example, any such problems could result in:

- delays in development, manufacture and roll-out of new products;
- additional development costs;
- loss of, or delays in, market acceptance;
- diversion of technical and other resources from our other development efforts;
- · claims for damages by our customers or others against us; and
- loss of credibility with our current and prospective customers.

Any such event could have a material adverse effect on our business, financial condition, and results of operations.

We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.

We aim to use the most advanced manufacturing process technology appropriate for our solutions that is available from our third-party foundries. As a result, we periodically evaluate the benefits of migrating our solutions to other technologies to improve performance and reduce costs. These ongoing efforts require us from time to time to modify the manufacturing processes for our products and to redesign some products, which in turn may result in delays in product deliveries.

For example, as smaller line width geometry manufacturing processes become more prevalent, we intend to move our future products to increasingly smaller geometries to integrate greater levels of memory capacity and/or functionality into our products. This transition will require us and our third-party foundries to migrate to new designs and manufacturing processes for smaller geometry products.

We may face difficulties, delays, and increased expense as we transition our products to new processes, and potentially to new foundries. We will depend on our third-party foundries as we transition to new processes. We cannot assure our stockholders that our third-party foundries will be able to effectively manage such transitions or that we will be able to maintain our relationship with our third-party foundries or develop relationships with new third-party foundries. If we or any of our third-party foundries experience significant delays in transitioning to new processes or fail to efficiently implement transitions, we could experience reduced manufacturing yields, delays in product deliveries and increased expenses, any of which could harm our relationships with our customers and our operating results.

Changes to industry standards and technical requirements relevant to our products and markets could adversely affect our business, results of operations and prospects.

Our products are only a part of larger electronic systems. All products incorporated into these systems must comply with various industry standards and technical requirements created by regulatory bodies or industry participants to operate efficiently together. Industry standards and technical requirements in our markets are evolving and may change significantly over time. For our products, the industry standards are developed by the Joint Electron Device Engineering Council, an industry trade organization. In addition, large industry-leading semiconductor and electronics companies play a significant role in developing standards and technical requirements for the product ecosystems within which our products can be used. Our customers also may design certain specifications and other technical requirements specific to their products and solutions. These technical requirements may change as the customer introduces new or enhanced products and solutions.

Our ability to compete in the future will depend on our ability to identify and comply with evolving industry standards and technical requirements. The emergence of new industry standards and technical requirements could render our products incompatible with products developed by other suppliers or make it difficult for our products to meet the requirements of certain of our customers in automotive, transportation, industrial, data storage, and other markets. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards and requirements. If our products are not in compliance with prevailing industry standards and technical requirements for a significant period of time, we could miss opportunities to achieve crucial design wins, our revenue may decline and we may incur significant expenses to redesign our products to meet the relevant standards, which could adversely affect our business, results of operations and prospects.

Our success depends on our ability to attract and retain key employees, and our failure to do so could harm our ability to grow our business and execute our business strategies.

Our success depends on our ability to attract and retain our key employees, including our management team and experienced engineers. Competition for personnel in the semiconductor memory technology field, and in the MRAM space in particular, is intense, and the availability of suitable and qualified candidates is limited. We compete to attract and retain qualified research and development personnel with other semiconductor companies, universities, and research institutions. Given our experience as an early entrant in the MRAM space, our employees are frequently contacted by MRAM startups and MRAM groups within larger companies seeking to employ them. The members of our management and our key employees are at-will. If we lose the services of any key senior management member or employee, we may not be able to locate suitable or qualified replacements, and may incur additional expenses to recruit and train new personnel, which could severely impact our business and prospects. The loss of the services of one or more of our key employees, especially our key engineers, or our inability to attract and retain qualified engineers, could harm our business, financial condition, and results of operations.

We currently maintain and are seeking to expand operations outside of the United States which exposes us to significant risks.

The success of our business depends, in large part, on our ability to operate successfully from geographically disparate locations and to further expand our international operations and sales. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic, and political risks that are different from those we face in the United States. We cannot be sure that further international expansion will be successful. In addition, we face risks in doing business internationally that could expose us to reduced demand for our products, lower prices for our products or other adverse effects on our operating results. The success and profitability, as well as the expansion, of our international operations are subject to numerous risks and uncertainties, many of which are outside of our control, such as the following:

- public health issues, such as the COVID-19 pandemic, which can result in varying impacts to our business, employees, partners, customers, distributors or suppliers internationally as discussed elsewhere in this "Risk Factors" section;
- difficulties, inefficiencies and costs associated with staffing and managing foreign operations;
- longer and more difficult customer qualification and credit checks;
- greater difficulty collecting accounts receivable and longer payment cycles;
- the need for various local approvals to operate in some countries;
- difficulties in entering some foreign markets without larger-scale local operations;
- changes in import/export laws, trade restrictions, regulations and customs and duties and tariffs (foreign and domestic);
- compliance with local laws and regulations;
- unexpected changes in regulatory requirements, including the elimination of tax holidays;
- reduced protection for intellectual property rights in some countries;
- adverse tax consequences as a result of repatriating cash generated from foreign operations to the United States;
- adverse tax consequences, including potential additional tax exposure if we are deemed to have established a permanent establishment outside of the United States;
- the effectiveness of our policies and procedures designed to ensure compliance with the Foreign Corrupt Practices Act of 1977 and similar regulations;
- fluctuations in currency exchange rates, which could increase the prices of our products to customers outside of the United States, increase the expenses of our international operations by reducing the purchasing power of the U.S. dollar and expose us to foreign currency exchange rate risk if, in the future, we denominate our international sales in currencies other than the U.S. dollar;
- new and different sources of competition;
- political, economic, and social instability;
- terrorism and acts of war, such as the military conflict in Ukraine, which could have a negative impact on sales throughout Europe and Asia; and

• US Department of Commerce regulations or restrictions on exports of certain semiconductor technologies and equipment to China.

Our failure to manage any of these risks successfully could harm our operations and reduce our revenue.

Risk Factors Related to Our Intellectual Property and Technology

Failure to protect our intellectual property could substantially harm our business.

Our success and ability to compete depend in part upon our ability to protect our intellectual property. We rely on a combination of intellectual property rights, including patents, mask work protection, copyrights, trademarks, trade secrets and know-how, in the United States and other jurisdictions. The steps we take to protect our intellectual property rights may not be adequate, particularly in foreign jurisdictions such as China. Any patents we hold may not adequately protect our intellectual property rights or our products against competitors, and third parties may challenge the scope, validity, or enforceability of our issued patents, which third parties may have significantly more financial resources with which to litigate their claims than we have to defend against them. In addition, other parties may independently develop similar or competing technologies designed around any patents or patent applications that we hold. Some of our products and technologies are not covered by any patent or patent application, as we do not believe patent protection of these products or technologies is critical to our business strategy at this time. A failure to timely seek patent protection on products or technologies.

In addition to patents, we also rely on contractual protections with our customers, suppliers, distributors, employees, and consultants, and we implement security measures designed to protect our trade secrets and know-how. However, we cannot assure our stockholders that these contractual protections and security measures will not be breached, that we will have adequate remedies for any such breach or that our customers, suppliers, distributors, employees, or consultants will not assert rights to intellectual property or damages arising out of such contracts.

We may initiate claims against third parties to protect our intellectual property rights if we are unable to resolve matters satisfactorily through negotiation. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming, and distracting to management. It could also result in the impairment or loss of portions of our intellectual property, as an adverse decision could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively impact our business, financial condition, and results of operations. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. Our failure to secure, protect and enforce our intellectual property rights could materially harm our business.

We may face claims of intellectual property infringement, which could be time-consuming, costly to defend or settle, result in the loss of significant rights, harm our relationships with our customers and distributors, or otherwise materially adversely affect our business, financial condition, and results of operations.

The semiconductor memory industry is characterized by companies that hold patents and other intellectual property rights and that vigorously pursue, protect, and enforce intellectual property rights. These companies include patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence. From time to time, third parties may assert against us and our customers' patent and other intellectual property rights to technologies that are important to our business. We have in the past, and may in the future, face such claims.

Claims that our products, processes, or technology infringe third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and technical personnel. We may also be obligated to indemnify our customers or business partners in connection with any such litigation, which could result in increased costs. Infringement claims also could harm our relationships with our customers or distributors and might deter future customers from doing business with us. If any such proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the infringing products, processes or technology;
- pay substantial damages for infringement;

- expend significant resources to develop non-infringing products, processes or technology, which may not be successful;
- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor; or
- pay substantial damages to our customers to discontinue their use of or to replace infringing technology sold to them with non-infringing technology, if available.

Any of the foregoing results could have a material adverse effect on our business, financial condition, and results of operations. Furthermore, our exposure to the foregoing risks may also be increased if we acquire other companies or technologies. For example, we may have a lower level of visibility into the development process with respect to intellectual property or the care taken to safeguard against infringement risks with respect to the acquired company or technology. In addition, third parties may make infringement and similar or related claims after we have acquired technology that had not been asserted prior to the acquisition.

We make significant investments in new technologies and products that may not achieve technological feasibility or profitability or that may limit our revenue growth.

We have made and will continue to make significant investments in research and development of new technologies and products, including new and more technically advanced versions of our MRAM technology.

Investments in new technologies are speculative and technological feasibility may not be achieved. Commercial success depends on many factors including demand for innovative technology, availability of materials and equipment, selling price the market is willing to bear, competition and effective licensing or product sales. We may not achieve significant revenue from new product investments for a number of years, if at all. Moreover, new technologies and products may not be profitable, and even if they are profitable, operating margins for new products and businesses may not be as high as the margins we have experienced historically or originally anticipated. Our inability to capitalize on or realize substantial revenue from our significant investments in research and development could harm our operating results and distract management, harming our business.

Interruptions in our information technology systems could adversely affect our business.

We rely on the efficient and uninterrupted operation of complex information technology systems and networks to operate our business. Any significant disruption to our systems or networks, including, but not limited to, new system implementations, computer viruses, security breaches, facility issues, natural disasters, terrorism, war, telecommunication failures or energy blackouts, could have a material adverse impact on our operations, sales, and financial results. Such disruption could result in a loss of our intellectual property or the release of sensitive competitive information or supplier, customer, or employee personal data. Any loss of such information could harm our competitive position, result in a loss of customer confidence, and cause us to incur significant costs to remedy the damages caused by any such disruptions or security breaches. Additionally, any failure to properly manage the collection, handling, transfer, or disposal of personal data of employees and customers may result in regulatory penalties, enforcement actions, remediation obligations, litigation, fines, and other sanctions.

We may experience attacks on our data, attempts to breach our security and attempts to introduce malicious software into our IT systems. If attacks are successful, we may be unaware of the incident, its magnitude, or its effects until significant harm is done. Any such attack or disruption could result in additional costs related to rebuilding of our internal systems, defending litigation, responding to regulatory actions, or paying damages. Such attacks or disruptions could have a material adverse impact on our business, operations, and financial results.

Third-party service providers, such as wafer foundries, assembly and test contractors, distributors and other vendors have access to certain portions of our and our customers' sensitive data. In the event that these service providers do not properly safeguard the data that they hold, security breaches and loss of data could result. Any such loss of data by our

third-party service providers could negatively impact our business, operations, and financial results, as well as our relationship with our customers.

Risk Factors Related to Regulatory Matters and Compliance

To comply with environmental laws and regulations, we may need to modify our activities or incur substantial costs, and if we fail to comply with environmental regulations, we could be subject to substantial fines or be required to have our suppliers alter their processes.

The semiconductor memory industry is subject to a variety of international, federal, state, and local governmental regulations directed at preventing or mitigating environmental harm, as well as to the storage, discharge, handling, generation, disposal and labeling of toxic or other hazardous substances. Failure to comply with environmental regulations could subject us to civil or criminal sanctions and property damage or personal injury claims. Compliance with current or future environmental laws and regulations could restrict our ability to expand our business or require us to modify processes or incur other substantial expenses which could harm our business. In response to environmental concerns, some customers and government agencies impose requirements for the elimination of hazardous substances, such as lead (which is widely used in soldering connections in the process of semiconductor packaging and assembly), from electronic equipment. For example, the European Union adopted its Restriction on Hazardous Substance Directive which prohibits, with specified exceptions, the sale in the EU market of new electrical and electronic equipment containing more than agreed levels of lead or other hazardous materials and China has enacted similar regulations. Environmental laws and regulations such as these could become more stringent over time, causing a need to redesign technologies, imposing greater compliance costs, and increasing risks and penalties associated with violations, which could seriously harm our business.

Increasing public attention has been focused on the environmental impact of electronic manufacturing operations. While we have not experienced any materially adverse effects on our operations from recently adopted environmental regulations, our business and results of operations could suffer if for any reason we fail to control the storage or use of, or to adequately restrict the discharge or disposal of, hazardous substances under present or future environmental regulations.

Regulations related to "conflict minerals" may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.

Pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act, the SEC has adopted requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These requirements require companies to perform diligence and disclose and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. These requirements could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of our products, and affect our costs and relationships with customers, distributors, and suppliers as we must obtain additional information from them to ensure our compliance with the disclosure requirement. In addition, we incur additional costs in complying with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Since our supply chain is complex, we have not been able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free and these customers may discontinue, or materially reduce, purchases of our products, which could result in a material adverse effect on our results of operations and our financial condition may be adversely affected.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income and tax credits to offset tax. As of December 31, 2022, we had gross federal net operating loss carryforwards of approximately \$119.9 million, of which \$79.1 million will expire in 2028 through 2037 if not utilized, and \$40.8 million will carryover indefinitely. As of December 31, 2022, we had state net operating loss carryforwards of approximately \$50.3 million, of which \$47.5 million will expire in 2028 through 2041 if not utilized, and \$2.8 million will carryover indefinitely. The federal NOLs generated prior to 2018 will continue to be governed by

the NOL tax rules as they existed prior to the adoption of the 2017 Tax Cuts and Jobs Act (2017 Tax Act), which means that generally they will expire 20 years after they were generated if not used prior thereto. The 2017 Tax Act repealed the 20-year carryforward and two-year carryback of NOLs originating after December 31, 2017, and also limits the NOL deduction to 80% of taxable income for tax years beginning after December 31, 2017. Any NOLs generated in 2018 and forward will be carried forward and will not expire. There is no current impact to us as we continue to be in a loss position for U.S. income tax purposes. Future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Section 382 of the Code. The ability to utilize our net operating losses and tax credits could also be impaired under state law. As a result, we might not be able to utilize a material portion of our state NOLs and tax credits.

Risks Related to Our Common Stock

We expect that the price of our common stock will fluctuate substantially.

The market price of our common stock is likely to be highly volatile and may fluctuate substantially due to many factors, including:

- the duration and severity of the COVID-19 pandemic and its effects on our business, financial condition, results of operations and cash flows;
- the introduction of new products or product enhancements by us or others in our industry;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, capital commitments or restructurings;
- disputes or other developments with respect to our or others' intellectual property rights;
- product liability claims or other litigation;
- quarterly variations in our results of operations or those of others in our industry;
- sales of large blocks of our common stock, including sales by our executive officers and directors;
- changes in senior management or key personnel;
- changes in earnings estimates or recommendations by securities analysts; and
- general market conditions and other factors, including factors unrelated to our operating performance or the operating performance of our competitors, including those due to the duration and severity of the COVID-19 pandemic and the military conflict in Ukraine.

Stock markets generally have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, the semiconductor memory industry is highly cyclical, and our markets may experience significant cyclical fluctuations in demand as a result of changing economic conditions, budgeting and buying patterns of customers and other factors. Fluctuations in our revenue and operating results could also cause our stock price to decline.

In addition, in the past, class action litigation has often been instituted against companies whose securities have experienced periods of volatility in market price, or for other reasons. Securities litigation brought against us following volatility in our stock price or otherwise, regardless of the merit or ultimate results of such litigation, could result in substantial costs, which would hurt our financial condition and operating results and divert management's attention and resources from our business.

These and other factors may make the price of our stock volatile and subject to unexpected fluctuation.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include that:

- our board of directors has the right to expand the size of our board of directors and to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- our stockholders may not act by written consent or call special stockholders' meetings; as a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors, the chairman of the board or the chief executive officer;
- our amended and restated certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the affirmative vote of holders of at least 66-2/3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, will be required (a) to amend certain provisions of our certificate of incorporation, including provisions relating to the size of the board, special meetings, actions by written consent and cumulative voting and (b) to amend or repeal our amended and restated bylaws, although such bylaws may be amended by a simple majority vote of our board of directors;
- stockholders must provide advance notice and additional disclosures to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and
- our board of directors may issue, without stockholder approval, shares of undesignated preferred stock; the ability to issue undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

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

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

• any derivative action or proceeding brought on our behalf;

- any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee to us or our stockholders;
- any action asserting a claim against us arising under the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.

Effective December 31, 2021, we ceased to be an "emerging growth company," and certain reduced reporting requirements applicable to emerging growth companies no longer apply to us, which is expected to increase our costs as a public company and place additional demands on management.

Effective December 31, 2021, we ceased to be classified as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act (the JOBS Act). We have previously taken advantage of certain reduced reporting requirements pursuant to the JOBS Act specifically applicable to emerging growth companies, including exemptions from the requirements of holding advisory "say-on-pay" and the related "say-on frequency" votes on executive compensation. Since we are no longer classified as an emerging growth company, we are now required to comply with those additional reporting requirements for which we were previously exempt. For example, we were required to hold a say-on-pay vote and a say-on frequency vote at our 2022 annual meeting of stockholders. As a result, we expect that we will require additional attention from management with respect to our additional reporting requirements and will incur increased costs, which could include higher legal fees, accounting fees, consultant fees and fees associated with investor relations activities, among others.

General Risk Factors

Unfavorable economic and market conditions, domestically and internationally, may adversely affect our business, financial condition, results of operations and cash flows.

We have significant customer sales both in the United States and internationally. We also rely on domestic and international suppliers, manufacturing partners and distributors. We are therefore susceptible to adverse U.S. and international economic and market conditions. If any of our manufacturing partners, customers, distributors or suppliers experience slowdowns in their business, serious financial difficulties or cease operations, including as a result of the COVID-19 pandemic, our business will be adversely affected. In addition, the adverse impact of general economic factors that are beyond our control, including, but not limited to, housing markets, recession, inflation, deflation, consumer credit activity, consumer debt levels, fuel and energy costs, interest rates, tax rates and policy, unemployment trends, potential industry downturn, the impact of natural disasters such as pandemics, civil disturbances, terrorist activities and acts of war, including the military conflict in Ukraine, may adversely impact consumer spending, which

may adversely impact our customers' spending and demand for our products. Additionally, the military conflict in Ukraine and escalating geopolitical tensions resulting from such conflict have resulted and may continue to result in sanctions, tariffs, and import-export restrictions which, when combined with retaliatory actions taken by Russia, could cause further inflationary pressures and economic and supply chain disruptions, as well as cause us to experience extended lead times and increased prices from our suppliers. Any of the foregoing could adversely affect our business, financial condition, results of operations and cash flows.

Our business may be adversely impacted by natural disasters and other catastrophic events.

Our operations and business, and those of our manufacturing partners, customers, distributors, or suppliers, can be disrupted by natural disasters; industrial accidents; public health issues, such as the COVID-19 pandemic; cybersecurity incidents; interruptions of service from utilities, transportation, telecommunications, or IT systems providers; manufacturing equipment failures; or other catastrophic events. For example, some of our foundries and suppliers' facilities in Asia are located near known earthquake fault zones and, therefore, are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, such as power loss, fire, floods, and similar events. If any such natural disasters or other catastrophic events were to occur, our ability to operate our business could be seriously impaired. In addition, we may not have adequate insurance to cover our losses resulting from disasters or other similar significant business interruptions. Any significant losses that are not recoverable under our insurance policies could seriously impair our business and financial condition.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

We lease office space for our corporate headquarters located in Chandler, Arizona and for our design facility located in Austin, Texas. We also lease fabrication, lab, and office space for our manufacturing operations in Chandler, Arizona.

The Chandler, Arizona corporate headquarters lease is for 18,815 square feet of office and laboratory space. The prior lease for the Chandler, Arizona corporate headquarters facility expired in January 2022, upon which a new lease was entered into, with an initial term that ends on January 31, 2029, and an option to renew the lease through January 31, 2034. The Austin, Texas lease is for 6,171 square feet of space for our design facility. The prior lease for the Austin, Texas facility expired in January 2022, upon which a new lease was entered into with an initial term that ends on April 15, 2027, and an option to renew the lease through April 15, 2030. The Chandler, Arizona manufacturing operations lease is for 11,496 square feet of fabrication, lab, and office space. The prior Chandler, Arizona manufacturing operations lease was initially set to expire in January 2023 but was renewed and amended in 2022 to extend the lease through January 2028.

We believe our existing facilities are well maintained and in good operating condition and they are adequate for our foreseeable business needs.

Item 3. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising from the ordinary course of our business. Management is currently not aware of any matters that will have a material adverse effect on our financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Trading Market for our Common Stock

Our common stock has been listed on the Nasdaq Global Market under the symbol "MRAM" since October 7, 2016. Prior to that date, there was no public trading market for our common stock.

Holders of Record

As of February 28, 2023, we had 19 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividends

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends on our capital stock in the foreseeable future. In addition, our existing credit facility prohibits our ability to pay dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support operations and to finance the growth and development of our business. Any future determination to pay dividends will be made at the discretion of our board of directors subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions, and capital requirements. Our future ability to pay cash dividends on our capital stock may also be limited by the terms of any future debt or preferred securities or future credit facility.

Item 6. [Reserved].

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

You should read the following discussion and analysis of our financial condition and results of operations together with our audited financial statements and related notes included elsewhere in this report. This discussion and other parts of this report contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations, and intentions. As a result of many factors, including those factors set forth in the "Risk Factors" section of this report, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

For an overview of our business, see "Part I - Item 1. Business."

Key Metrics

We monitor a variety of key financial metrics to help us evaluate trends, establish budgets, measure the effectiveness of our business strategies, and assess operational efficiencies. These financial metrics include revenue, gross margin, operating expenses, and operating income determined in accordance with generally accepted accounting principles in the United States (GAAP). Additionally, we monitor and project cash flow to determine our sources and uses for working capital to fund our operations. We also monitor Adjusted EBITDA, a non-GAAP financial measure, and design wins. We define Adjusted EBITDA as net income or loss adjusted for interest expense, taxes, depreciation and amortization, stock-based compensation expense, and restructuring costs, if any.

Adjusted EBITDA. Our management and board of directors use Adjusted EBITDA to understand and evaluate our operating performance and trends, to prepare and approve our annual budget and to develop short-term and long-term operating and financing plans. Accordingly, we believe that Adjusted EBITDA provides useful information for investors in understanding and evaluating our operating results in the same manner as our management and our board of directors. Adjusted EBITDA is a non-GAAP financial measure and should be considered in addition to, not as superior to, or as a substitute for, net income reported in accordance with GAAP. The following table presents a reconciliation of net income, the most directly comparable GAAP measure, to Adjusted EBITDA for the periods indicated:

	Y	Year Ended December 31,		
		2022 202		2021
Adjusted EBITDA reconciliation:				
Net income	\$	6,129	\$	4,343
Depreciation and amortization		982		1,455
Stock-based compensation expense		4,408		3,227
Interest expense		274		547
Income tax expense		14		4
Adjusted EBITDA	\$	11,807	\$	9,576

Design wins. To continue to grow our revenue, we must continue to achieve design wins for our MRAM products. We consider a design win to occur when an OEM or contract manufacturer notifies us that it has qualified one of our products as a component in a product or system for production. Because the life cycles for our customers' products can last for many years, if these products have successful commercial introductions, we expect to continue to generate revenues over an extended period of time for each successful design win. New design wins in each successive quarter of 2022 were 61, 49, 48, and 52, respectively, compared to 40, 37, 40, and 64 in each successive quarter of 2021, respectively.

Effect of the COVID-19 Pandemic on our Business

The COVID-19 outbreak has resulted in government authorities around the world implementing numerous measures to try to reduce the spread of COVID-19, such as travel bans and restrictions, quarantines, "shelter-in-place," "stay-at-home," total lock-down orders, business limitations or shutdowns and similar orders. More recently, new variants of COVID-19, such as the Omicron variant and its subvariants, that are significantly more contagious than previous strains have emerged. The spread of these new strains has caused many government authorities and businesses to reimplement the aforementioned measures to try to reduce the spread that had become less prevalent. While some of these restrictions have been lifted, the lingering impact of the COVID pandemic continues to create significant volatility throughout the

global economy, including supply chain constraints, labor supply issues and higher inflation. Accordingly, it is unclear at this point the full impact COVID-19 and its variants will have on the global economy and on our company.

Overall, our business remained operational in the midst of the COVID-19 pandemic. However, as a result of the ongoing related responses from government authorities, our business, results of operations and financial condition have been, and continue to be, adversely impacted. For example, we have experienced electronics supply chain and demand disruptions from extended factory shutdowns, particularly in some Asian countries, which created unusual order patterns, and subsequently slowed Toggle MRAM demand, particularly from our industrial customers. We continue to see an impact as reflected in reduced demand from some customers and distributors. While we are working closely with our manufacturing partners and suppliers to support demand for our products, the full impact on our demand from customers remains unknown. Management is thus planning for a broad range of possible demand outcomes in an effort to ensure the success of our business under a variety of end market conditions.

The emergence of potential new variants of COVID-19, and the prevalence of cases of infection globally adds additional uncertainty and could result in further impacts to our business and operations, including those discussed above and in "Risk Factors" in Part II, Item 1A of this report.

Recently, the United States Government declared that it was no longer treating COVID-19 as a pandemic. Since our business is dependent on a global supply chain, we expect to continue to navigate the impact of COVID-19, particularly in some Asian countries. We will continue to monitor the situation and take additional actions as warranted. These actions may include further altering our operations in order to protect the best interests of our employees, customers and suppliers, and to comply with government requirements, while also planning and executing our business to best support our customers, suppliers, and partners.

The ultimate extent of the impact of the COVID-19 pandemic on our business, results of operations and financial condition will depend on future developments, which are highly uncertain, continuously evolving and cannot be predicted, including, but not limited to, the duration and spread of the COVID-19 outbreak, its severity, the emergence and severity of its variants, the actions to contain the virus or treat its impact, such as the availability and efficacy of vaccines (particularly with respect to emerging strains of the virus) and potential hesitancy to use them, general economic factors, such as increased inflation, supply chain restraints, labor supply issues, and how quickly and to what extent normal economic and operating conditions can resume. Accordingly, our current results and financial condition discussed herein may not be indicative of future operating results and trends. See "Risk Factors" in Part II, Item 1A of this report for additional risks we face due to the COVID-19 pandemic.

Results of Operations

Below are factors we want to highlight for understanding our 2022 annual results and year over year comparison with proper historical perspective:

- 2022 represented a year of broad semiconductor supply chain challenges driven by factors including the COVID-19 pandemic and international trade conflicts, which significantly impacted our results.
- Our relationships with our foundry partners and assembly and test partners contributed significantly to our ability to secure more capacity and support the growth of product revenue in 2022 compared to 2021.
- Our manufacturing efficiency and yields improved throughout 2022 resulting in significantly higher product margins compared to 2021.

The following table sets forth our results of operations for the periods indicated:

	Year Ended December 31,					
	Decem	December 31, December 31,				
	2022	2022 2021		2021		
	,	usands)	(As a percentage	of revenue)		
Product sales	\$ 55,032	\$ 43,931	92 %	80 %		
Licensing, royalty, patent, and other revenue	4,953	11,215	8	20		
Total revenue	59,985	55,146	100	100		
Cost of product sales	25,112	21,045	42	38		
Cost of licensing, royalty, patent, and other						
revenue	928	1,029	2	2		
Total cost of sales	26,040	22,074	43	40		
Gross profit	33,945	33,072	57	60		
Operating expenses:						
Research and development	11,108	12,628	19	23		
General and administrative	11,741	10,949	20	20		
Sales and marketing	4,869	4,460	8	8		
Total operating expenses	27,718	28,037	47	51		
Income from operations	6,227	5,035	10	9		
Interest expense	(274)	(547)		(1)		
Other income (expense), net	190	(141)				
Net income before income taxes	6,143	4,347	10	8		
Income tax expense	(14)	(4)				
Net income and comprehensive income	\$ 6,129	\$ 4,343	10 %	8 %		

Comparison of the Years Ended December 31, 2022 and 2021

Revenue

We generated 85% and 66% of our revenue from products sold through distributors for the years ended December 31, 2022 and 2021, respectively.

We maintain a direct selling relationship, for strategic purposes, with several key customer accounts. We have organized our sales team and representatives into three primary regions: Asia-Pacific (APAC); North America; and Europe, Middle East and Africa (EMEA). We recognize revenue by geography based on the region in which our products are sold, and not to where the end products in which they are assembled are shipped. Our revenue by region for the periods indicated was as follows (in thousands):

	Year Ended	Year Ended December 31,			
	2022	2021			
APAC	\$ 35,631	\$ 32,327			
North America	14,533	15,813			
EMEA	9,821	7,006			
Total revenue	\$ 59,985	\$ 55,146			

	Ŋ	Year Ended December 31,			Chan	ge	
		2022		2021		Amount	%
	(Dollars in thousands)						
Product sales	\$	55,032	\$	43,931	\$	11,101	25.3 %
Licensing, royalty, patent, and other							
revenue		4,953		11,215		(6,262)	(55.8)%
Total revenue	\$	59,985	\$	55,146	\$	4,839	8.8 %

Total revenue increased by \$4.9 million, or 8.8%, from \$55.1 million during the year ended December 31, 2021, to \$60.0 million during the year ended December 31, 2022. Product sales increased by \$11.1 million or 25.3%, from \$43.9 million to \$55.0 million. The increase was primarily driven by a higher volume of toggle units produced and sold, along with average sales price increases to offset supplier increases.

Licensing, royalty, patent, and other revenue is a highly variable revenue item characterized by a small number of transactions annually with revenue based on size and terms of each transaction. Licensing, royalty, patent, and other revenue decreased by \$6.3 million, from \$11.2 million during the year ended December 31, 2021 to \$5.0 million during the year ended December 31, 2022. The decrease was primarily due to the intellectual property monetization deal to sell five patents to a customer for a total contract value of \$5.3 million in 2021, along with a decrease in license revenues from a contractual agreement with a customer for the development of a RAD-Hard product, consisting of a technology license, a design license agreement and development contract entered into during the year ended December 31, 2021. There were no patent sales during the year ended December 31, 2022.

Cost of Sales and Gross Margin

	Year Ended	December 31,	Chan	ge
	2022 2021		Amount	%
		(Dollars in tho	usands)	
Cost of sales	\$ 25,112	\$ 21,045	\$ 4,067	19.3 %
Cost of licensing, royalty, patent, and other				
revenue	928	1,029	(101)	(9.8)%
Total cost of sales	\$ 26,040	\$ 22,074	\$ 3,966	18.0 %
Gross margin	56.6 %	60.0 %	*	*

Cost of product sales increased by \$4.1 million, or 19.3%, from \$21.0 million during the year ended December 31, 2021, to \$25.1 million during the year ended December 31, 2022. The increase was due to an increase in product sales and price increases from suppliers, partially offset by increased yields on toggle products.

Cost of licensing, royalty, patent, and other revenue decreased by \$0.1 million, or 9.8%, from \$1.0 million during the year ended December 31, 2021, to \$0.9 million during the year ended December 31, 2022. The decrease was due primarily to a decline in licensing costs.

Our gross margin decreased from 60.0% during the year ended December 31, 2021, to 56.6% during the year ended December 31, 2022. Our gross margin decreased due to price increases from suppliers and lower licensing, royalty, patent, and other revenue.

Operating Expenses

Our operating expenses consist of research and development, general and administrative and sales and marketing expenses. Personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation, are among the most significant component of each of our operating expense categories.

	Year Decem	Ended ber 31,	Change		
	2022	2021	Amount	%	
		(Dollars in th	ousands)		
Research and development	\$ 11,108	\$ 12,628	\$ (1,520)	(12.0)%	
Research and development as a % of revenue	19 %	5 23 %	6		

Research and Development Expenses. Research and development expenses decreased by \$1.5 million, or 12.0%, from \$12.6 million during the year ended December 31, 2021, to \$11.1 million during the year ended December 31, 2022. The decrease was primarily due to higher expenses in 2021 relating to the development of our 28 nm product that started production in 2022.

		Ended ber 31.	Chan	Change			
	2022	2021	Amount	%			
	(Dollars in thousands)						
General and administrative	\$ 11,741	\$ 10,949	\$ 792	7.2 %			
General and administrative as a % of revenue	20 %	6 20 %	0				

General and Administrative Expenses. General and administrative expenses increased by \$0.8 million, or 7.2%, from \$10.9 million during the year ended December 31, 2021, to \$11.7 million during the year ended December 31, 2022. The increase was primarily due to increases in expenses related to profit sharing and professional service fees.

	Year l Deceml	Chan	hange				
	2022	2021	Amount	%			
	(Dollars in thousands)						
Sales and marketing	\$ 4,869	\$ 4,460	\$ 409	9.2 %			
Sales and marketing as a % of revenue	8 %	8 %	0				

Sales and Marketing Expenses. Sales and marketing expenses increased by \$0.4 million, or 9.2%, from \$4.5 million during the year ended December 31, 2021, to \$4.9 million during the year ended December 31, 2022. The increase was primarily due to an increase in variable compensation costs.

Interest Expense

	Year	Year Ended December 31,		Cha	Change		
		2022		2021	Amount	%	
		(Dollars in thousands)					
Interest expense	\$	274	\$	547	\$ (273)	(49.9)%	

Interest expense decreased by \$0.3 million, or 49.9%, from \$0.5 million during the year ended December 31, 2021, to \$0.3 million during the year ended December 31, 2022. The decrease was due to lower outstanding balances under the credit facility during the year resulting in less interest incurred.

Other Income (Expense), Net

	Yea	Year Ended December 31,			Cha	Change	
	2022			2021	Amount	%	
	(Dollars in thousands)						
Other income (expense), net	\$	190	\$	(141)	\$ 331	(234.8)%	

Other income (expense), net changed by \$0.3 million, or 234.8%, from \$0.1 million of expense during the year ended December 31, 2021 to \$0.2 million of income during the year ended December 31, 2022. The increase was primarily due to interest income earned on the money market cash account.

Liquidity and Capital Resources

As of December 31, 2022, we had \$26.8 million of cash and cash equivalents, compared to \$21.4 million as of December 31, 2021. We believe our cash and cash equivalents, coupled with the amount available under our credit facility and our anticipated growth and sales levels are sufficient to meet our anticipated capital requirements in the next 12 months. Our future capital requirements will depend on many factors, including, among other things, our growth rate, the timing and extent of our spending to support research and development activities, the timing and cost of establishing additional sales and marketing capabilities, and the introduction of new products.

Additionally, see "Credit Facilities" below for information regarding our debt financing.

Cash Flows

The following table summarizes our cash flows for the periods indicated (in thousands):

	Year Ended December 31,			
	 2022 20		2021	
	 (In thousands)			
Cash provided by operating activities	\$ 9,493	\$	9,359	
Cash used in investing activities	(2,586)		(1,030)	
Cash used in financing activities	(1,521)		(1,519)	

Cash Flows From Operating Activities

During the year ended December 31, 2022, cash provided by operating activities was \$9.5 million, which primarily consisted of net income of \$6.1 million, adjusted by non-cash charges of \$5.3 million and a decrease of \$1.9 million in our net operating assets and liabilities. The non-cash charges primarily consisted of stock-based compensation of \$4.4 million, depreciation and amortization of \$1.0 million, and non-cash interest expense of \$0.1 million, offset by a gain on disposal of property and equipment of \$0.2 million. The change in our net operating assets and liabilities was primarily due to an increase of \$2.5 million in accounts receivable due to an increased sales volume and timing of cash receipts for outstanding balances and a \$0.3 million increase in inventory. These were offset by an increase of \$0.6 million in accounts payable due to timing of invoice due dates and a \$0.2 million increase in lease liabilities.

During the year ended December 31, 2021, cash provided by operating activities was \$9.4 million, which primarily consisted of net income of \$4.3 million, adjusted by non-cash charges of \$5.0 million and a change of \$4,000 in our net operating assets and liabilities. The non-cash charges primarily consisted of stock-based compensation of \$3.2 million, depreciation and amortization of \$1.5 million, and non-cash interest expense of \$0.3 million. The change in our net operating assets and liabilities was primarily due to an increase of \$1.7 million of accrued liabilities and an increase in deferred revenue of \$0.8 million related to timing of RAD-Hard licensing revenue recognition. These were offset by a decrease of \$0.7 million in inventory, an increase of \$0.5 million in prepaid expenses and other current assets, an increase of \$0.6 million in accounts receivable due to increased sales volume and timing of cash receipts for outstanding balances, a decrease of \$0.6 million in lease liabilities, and an increase of \$11,000 in other assets.

Cash Flows From Investing Activities

Cash used in investing activities during the years ended December 31, 2022 and 2021 was \$2.6 million and \$1.0 million, respectively, which consisted of capital expenditures primarily for the purchase of manufacturing equipment and purchased software.

Cash Flows From Financing Activities

During the year ended December 31, 2022, cash used in financing activities was \$1.5 million, which primarily consisted of \$2.4 million in payments on long-term debt offset by \$0.9 million in proceeds from stock option exercises and purchases of shares under our employee stock purchase plan.

During the year ended December 31, 2021, cash used in financing activities was \$1.5 million, which primarily consisted of \$3.4 million in payments on long-term debt offset by \$1.9 million in proceeds from stock option exercises and purchases of shares under our employee stock purchase plan.

Credit Facilities

In May 2017, we executed a Loan and Security Agreement (2017 Credit Facility) with Silicon Valley Bank (SVB) for a \$12.0 million term loan, which we subsequently amended in January 2019 and June 2019. In August 2019, we executed an Amended and Restated Loan and Security Agreement (2019 Credit Facility), which amended and restated the 2017 Credit Facility, providing for a formula revolving line of credit (Line of Credit) and a term loan (2019 Term Loan) with SVB to refinance in full the outstanding principal balance of \$8.0 million under the 2017 Credit Facility.

In July 2020, we executed the first amendment to the 2019 Credit Facility with SVB. The amendment, among other things, extended the initial 12-month interest-only period for the term loan to a 16-month interest-only period and lowered the floor interest rate. The floor interest rates for 2019 Term Loan and the Line of Credit Facility were reduced from 4.75% and 6.75% to 3.75% and 4.75%, respectively.

The amended Line of Credit allows for a maximum draw of \$5.0 million, subject to a formula borrowing base, has a two-year term and bears interest at a floating rate equal to the Wall Street Journal (WSJ) prime rate plus 1.5%, per annum, subject to a floor of 4.75%. As of December 31, 2022, the interest rate was 9.00%. The Line of Credit required a commitment fee of 1.6% of the maximum availability of the Line of Credit, which was paid in August 2019 upon closing, and was accounted for as a debt discount. The Line of Credit also provides for a termination fee equal to 1% of the maximum availability under the Line of Credit, which is due in case of a termination of the Line of Credit prior to the scheduled maturity date, and an unused facility fee equal to 0.125% per annum of the average unused portion of the Line of Credit, which is expensed as incurred. Currently, \$4.0 million remains available under the Line of Credit, subject to borrowing base availability. As of December 31, 2022, the effective interest rate under the Line of Credit was 9.36% and the outstanding balance was \$1.0 million. The Line of Credit was set to mature on August 5, 2022. The third amendment entered into on July 22, 2022, extended the maturity date of the Line of Credit to August 5, 2023.

The amended 2019 Term Loan provides for a \$6.0 million term loan. The amended 2019 Term Loan has a term of 46 months, and a 16-month interest-only period followed by 30 months of equal principal payments of \$200,000 per month, plus accrued interest. The 2019 Term Loan bears interest at a floating rate equal to the WSJ prime rate minus 0.75%, subject to a floor of 3.75%. As of December 31, 2022, the interest rate was 6.75%. A final payment of 7% of the original principal amount of the 2019 Term Loan must be made when the 2019 Term Loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise. The additional payment, which is accounted for as a debt discount, is being accreted using the effective interest method. The 2019 Term Loan has a prepayment fee equal to 2% of the total commitment, which is due only if the 2019 Term Loan is prepaid prior to the scheduled maturity date for any reason. As of December 31, 2022, the effective interest rate under the 2019 Term Loan was 6.94% and the outstanding balance was \$1.6 million. The 2019 Term Loan matures on June 1, 2023.

In conjunction with entering into the 2019 Credit Facility, on August 5, 2019, we and SVB amended and restated the warrant issued to SVB in connection with the first amendment to the 2017 Credit Facility, which was a warrant to purchase 9,375 shares of our common stock at an exercise price of \$8.91 per share, to add an option by SVB to put the warrant back to us for \$50,000 upon expiration or a liquidity event, to be prorated if SVB exercises a portion of the warrant. The warrant expires on July 6, 2023. The warrant is classified as a liability and recorded at fair value within other liabilities in our balance sheet. Due to the put right, the warrant is subject to fair value remeasurement at each subsequent reporting date until the exercise or expiration of the warrant. Any resulting change in the fair value of the warrant will be recorded as other (expense) income, net in our statements of income and comprehensive income. The other (expense) income recognized for the years ended 2022 and 2021 related to the change in fair value of the warrant has been minimal and immaterial to the financial statements.

Additionally, in conjunction with entering into the first amendment to the 2019 Credit Facility, on July 15, 2020, we issued an additional warrant to SVB to purchase 21,500 shares of our common stock at an exercise price of \$0.01 per share, which was to expire on July 15, 2025. The warrant was classified as equity and was recorded as a debt discount that was amortized to interest expense using the effective interest method. The fair value of the warrant was \$152,000 on the date of issuance using the Black-Scholes option-pricing model.

On July 22, 2021, SVB elected to exercise the warrant associated with the first amendment to the 2019 Credit Facility, which resulted in a net cashless exercise of the warrant and the issuance of 21,463 shares of our common stock.

Collateral for the 2019 Credit Facility includes all of our assets except for intellectual property. We are required to comply with certain covenants under the 2019 Credit Facility, including requirements to maintain a minimum cash balance and availability under the Line of Credit, and restrictions on certain actions without the consent of the lender, such as limitations on our ability to engage in mergers or acquisitions, sell assets, incur indebtedness, or grant liens or negative pledges on our assets, make loans or make other investments. Under these covenants, we are prohibited from paying cash dividends with respect to our capital stock. We were in compliance with all covenants at December 31, 2022. The 2019 Credit Facility contains a material adverse effect clause which provides that an event of default will occur if, among other triggers, an event occurs that could reasonably be expected to result in a material adverse effect on our business, operations, or condition, or on our ability to perform our obligations under the 2019 Term Loan. As of December 31, 2022, we do not believe that it is probable that the clause will be triggered within the next 12 months.

The amortization of the debt issuance costs and accretion of the debt discount is included in interest expense within the statement of income and comprehensive income and included in non-cash interest expense within the statements of cash flows.

For additional information about the 2019 Credit Facility, see Note 6 in the accompanying Notes to Financial Statements in Part II, Item 8 of this Form 10-K.

Critical Accounting Policies and Significant Judgements and Estimates

Our financial statements have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenue generated and expenses incurred during the reporting periods. We base our estimates on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Revenue Recognition

We recognize revenue when a customer obtains control of the promised products or services, in an amount that reflects the consideration we expect to receive in exchange for those products or services. We recognize revenue net of allowances for returns and price concessions, and any taxes imposed on revenue transactions, which are subsequently remitted to governmental authorities.

Nature of Products and Services

We derive our revenue from the sale of MRAM-based products in discrete unit form, licenses of and royalties on our MRAM and magnetic sensor technology, the sale of backend foundry services, and design services to third parties. We recognize sales of products in discrete unit form at a point in time, revenue related to licensing agreements when we have delivered control of the technology, revenue related to royalty agreements in the period in which sales generated from products sold using our technology occurs, sales of backend foundry services over time, and design services to third parties either at a point in time or over time, depending on the nature of the services.

Product Revenue

For products sold in their discrete form, we either sell our products directly to OEMs, ODMs, contract manufacturers (CMs), or through a network of distributors, who in turn sell to those customers. For sales directly to OEMs, ODMs and CMs, we recognize revenue when the OEM, ODM or CM obtains control of the product, which occurs at a point in time, generally upon shipment to the customer.

From time to time, we may provide distributors with price adjustments subsequent to the delivery of product to them and such amounts are dependent on the end customer and product sales price. Price adjustments can be based on a variety of factors, including customer, product, quantity, geography, and competitive differentiation. Price protection rights grant distributors the right to a credit in the event of declines in the price of our products. Under these circumstances, we remit back to the distributor a portion of their original purchase price after the resale transaction is completed in the form of a credit against the distributors' outstanding accounts receivable balance. The credits are on a per unit basis and are not given to the distributor until the distributor provides information regarding the sale to their end customer. We estimate these credits and record such estimates in the same period the related revenue is recognized, resulting in a reduction of product revenue and the establishment of an allowance for price adjustments for amounts due to distributors. We estimate credits to distributors based on the historical rate of credits provided to distributors relative to sales and evaluation of current market conditions. Revenue on shipments to distributors is recorded when control of the products has been transferred to the distributor.

We estimate the amount of our product sales that may be returned by our customers and record this estimate as a reduction of revenue in the period the related product revenue is recognized. We estimate our product return liability by analyzing our historical returns, current economic trends and changes in customer demand and acceptance of products. We have received insignificant returns to date and believe that returns of our products will continue to be minimal.

Upon the transfer of control, generally at shipment, we record a trade receivable for the selling price as there is a legally enforceable obligation of the distributor to pay for the product delivered, an allowance is recorded for the estimated discount that will be provided to the distributor, and the net of these amounts is recorded as revenue on the statements of income and comprehensive income.

License Revenue

For licenses of technology, recognition of revenue is dependent upon whether we have delivered rights to the technology, and whether there are future performance obligations under the contract. In some instances, the license agreements call for future events or activities to occur in order for milestone amounts to become due from the customer. The terms of such agreements include payment to us of one or more of the following: non-refundable upfront fees; and royalties on net sales of licensed products. Historically, these license agreements have not included other future performance obligations once the license has been transferred to the customer.

We recognize revenue from non-refundable upfront payments when the license is transferred to the customer and we have no other performance obligations.

We also entered into a contractual agreement with a customer during the year ended December 31, 2021 for the development of a RAD-Hard product, consisting of a technology license, a design license agreement and development contract and a separate contractual agreement with a customer during the year ended December 31, 2022 for the development of a strategic radiation hardened field programmable gate array product, consisting of a technology license to provide design and development services under the contractual agreement. We applied a five-step approach in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; and (5) recognizing revenue when the performance obligation is satisfied.

We concluded these contractual arrangements represent one arrangement and evaluated our promises to the customer and whether the performance obligations granted under the arrangement were distinct. The licenses provided to the customer are not transferable, are of limited value without the promised development services, and the customer cannot benefit from the license agreements without the specific obligated services in the development subcontract, as there is strong interdependency between the licenses and the development subcontract. Accordingly, we determined the licenses were not distinct within the context of the contract and combined the license with other performance obligations.

As a result, we are recognizing revenue related to the performance obligations over time using the input method based on costs incurred to date relative to the total expected costs of the contract over the performance obligation period.

Patents

In an effort to monetize on our intellectual property, we may sell patents to customers. The performance obligations are satisfied at the point in time at which the customer obtains control of the patents.

Royalties

We recognize revenue from sales-based royalties from licenses of our technology at the later of when (1) the sale occurs or (2) the performance obligation to which some or all of the sales-based royalty has been allocated is satisfied (in whole or in part). We record an unbilled receivable (within accounts receivable, net) for the portion of sales-based royalties that have been earned, but not invoiced at the end of each reporting period. The unbilled accounts receivable is an estimate of consideration to which we expect to be entitled for uses of our intellectual property. Certain customers report on a lagged basis and actual information is not available timely. The estimates recorded are based on historical trends in the customer's usage and current market conditions.

Inventory

We record inventories at the lower of cost, determined on a first-in, first-out basis or net realizable value. We write down inventory for estimated excess or obsolete inventory equal to the difference between cost and estimated net realizable value. Inventory write downs establish a new cost basis for inventory and charges are not subsequently reversed even if circumstances subsequently indicate that increased carrying amounts are recoverable. In estimating these reserves, our evaluation takes into consideration historical and expected future demand considering current market conditions and trends, the effect new products may have on the sale of existing products, technological obsolescence, and other factors. We record inventory write-downs for the valuation of inventory when required based on our analyses and any write-downs result in a new cost basis for the affected item.

Recent Accounting Pronouncements

See Note 2 in the accompanying Notes to Financial Statements in Part II, Item 8 of this Form 10-K for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one yet, of their potential impact on our financial condition of results of operations.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not required for a smaller reporting company.

Item 8. Financial Statements and Supplementary Data.

EVERSPIN TECHNOLOGIES, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Everspin Technologies, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Everspin Technologies, Inc. (the Company) as of December 31, 2022 and 2021, the related statements of income and comprehensive income, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosures to which it relates.

Accounting for Inventory

Description of the Matter	As discussed in Note 2 to the financial statements, Inventory is valued at the lower of cost or net realizable value using the first-in, first-out method. At December 31, 2022 the Company's inventory balance was \$6.7 million.
	Auditing the Company's accounting for inventory was challenging and complex primarily due to the high volume of transactions and multiple data sources involved in the initiation, processing, and recording of inventory transactions. The data sources include information received from the Company's several third-party suppliers involved in the manufacturing process.
How We Addressed the Matter in Our Audit	To test the Company's accounting for inventory, we performed audit procedures that included, among others, performing physical observation and direct confirmations of inventory held at third-party suppliers, and testing a sample of inventory transactions and manufacturing costs incurred during the year to evaluate the cost of inventory.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Phoenix, Arizona March 2, 2023

EVERSPIN TECHNOLOGIES, INC. Balance Sheets (In thousands, except share and per share amounts)

	December 31,			,
		2022		2021
Assets				
Current assets:				
Cash and cash equivalents	\$	26,795	\$	21,409
Accounts receivable, net		10,665		8,193
Inventory		6,683		6,396
Prepaid expenses and other current assets		604		762
Total current assets		44,747		36,760
Property and equipment, net		3,883		973
Right-of-use assets		6,641		913
Other assets		62		734
Total assets	\$	55,333	\$	39,380
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	\$	2,778	\$	1,776
Accounts payable	φ	3,533	φ	3,579
Deferred revenue		821		832
Current portion of long-term debt		2,594		3,370
Lease liabilities, current portion		1,122		724
Other liabilities		27		50
Total current liabilities		10,875		10,331
Long-term debt, net of current portion		10,675		1,529
Lease liabilities, net of current portion		5,580		68
Long-term income tax liability		214		214
Total liabilities	\$	16,669	\$	12,142
	Ф	10,009	Ф	12,142
Commitments and contingencies (Note 5)				
Stockholders' equity:				
Preferred stock, \$0.0001 par value per share; 5,000,000 shares authorized; no shares issued and outstanding as of December 31, 2022 and 2021				
Common stock, \$0.0001 par value per share; 100,000,000 shares authorized;				
20,374,288 and 19,858,460 shares issued and outstanding as of December 31, 2022				
and 2021		2		2
Additional paid-in capital		185,364		180,067
Accumulated deficit		(146,702)		(152,831)
Total stockholders' equity		38,664		27,238
Total liabilities and stockholders' equity	\$	55,333	\$	39,380
Tour monitor and stockholders equity	ψ	55,555	Ψ	57,500

EVERSPIN TECHNOLOGIES, INC. Statements of Income and Comprehensive Income (In thousands, except share and per share amounts)

	Year Ended December 31,			ber 31,
		2022		2021
Product sales	\$	55,032	\$	43,931
Licensing, royalty, patent, and other revenue		4,953		11,215
Total revenue		59,985		55,146
Cost of product sales		25,112		21,045
Cost of licensing, royalty, patent, and other revenue		928		1,029
Total cost of sales		26,040		22,074
Gross profit		33,945		33,072
Operating expenses: ¹				
Research and development		11,108		12,628
General and administrative		11,741		10,949
Sales and marketing		4,869		4,460
Total operating expenses		27,718		28,037
Income from operations		6,227		5,035
Interest expense		(274)		(547)
Other income (expense), net		190		(141)
Net income before income taxes		6,143		4,347
Income tax expense		(14)		(4)
Net income and comprehensive income	\$	6,129	\$	4,343
Net income per common share:				
Basic	\$	0.30	\$	0.22
Diluted	\$	0.29	\$	0.22
Weighted average shares of common stock outstanding:	-			
Basic		20,130,336		19,400,124
Diluted		20,775,925	_	19,972,145
		20,770,720		19,972,110
¹ Operating expenses include stock-based compensation as follows:				
Research and development	\$	1,704	\$	1,280
General and administrative	+	2,190	+	1,465
Sales and marketing		514		482
Total stock-based compensation	\$	4,408	\$	3,227

EVERSPIN TECHNOLOGIES, INC. Statements of Stockholders' Equity (In thousands, except share amounts)

	Common	Stoc	k	A	Additional Paid-In	Accumulated	St	Total ockholders'
	Shares	An	iount		Capital	Deficit		Equity
Balance at December 31, 2020	19,031,556	\$	2	\$	174,584	\$ (157,174)	\$	17,412
Issuance of common stock under stock incentive plans and								
exercise of stock options	805,441				2,256			2,256
Exercise of warrant	21,463		—					
Stock-based compensation expense					3,227			3,227
Net income			—			4,343		4,343
Balance at December 31, 2021	19,858,460	\$	2	\$	180,067	\$ (152,831)	\$	27,238
Issuance of common stock under stock incentive plans and								
exercise of stock options	515,828				889	_		889
Stock-based compensation expense					4,408			4,408
Net income			—			6,129		6,129
Balance at December 31, 2022	20,374,288	\$	2	\$	185,364	\$ (146,702)	\$	38,664

EVERSPIN TECHNOLOGIES, INC. Statements of Cash Flows (In thousands)

	Year Ended December 31,			oer 31,
		2022		2021
Cash flows from operating activities				
Net income	\$	6,129	\$	4,343
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization		982		1,455
Gain on sale of property and equipment		(167)		
Stock-based compensation		4,408		3,227
Non-cash warrant revaluation		(23)		19
Non-cash interest expense		105		319
Changes in operating assets and liabilities:				
Accounts receivable		(2,472)		(586)
Inventory		(287)		(675)
Prepaid expenses and other current assets		158		(492)
Other assets		(28)		11
Accounts payable		563		(571)
Accrued liabilities		(46)		1,696
Deferred revenue		(11)		832
Lease liabilities		182		(219)
Net cash provided by operating activities		9,493		9,359
Cash flows from investing activities				
Purchases of property and equipment		(2,788)		(1,030)
Proceeds received from sale of property and equipment		202		
Net cash used in investing activities		(2,586)		(1,030)
Cash flows from financing activities				
Payments on long-term debt		(2,400)		(3,400)
Payments of debt issuance costs		(10)		(11)
Proceeds from exercise of stock options and purchase of shares in employee stock purchase				
plan		889		1,892
Net cash used in financing activities		(1,521)		(1,519)
Net increase in cash and cash equivalents		5,386		6,810
Cash and cash equivalents at beginning of period		21,409		14,599
Cash and cash equivalents at end of period	\$	26,795	\$	21,409
Supplementary cash flow information:				
Interest paid	\$	169	\$	228
Operating cash flows paid for operating leases	\$	1,320	\$	1,603
Financing cash flows paid for finance leases	\$	11	\$	
Non-cash investing and financing activities:	· · · ·		-	
Right-of-use assets obtained in exchange for operating lease liabilities	\$	6,837	\$	_
Right-of-use assets obtained in exchange for finance lease liabilities	\$	36	\$	
Purchases of property and equipment in accounts payable and accrued liabilities	\$	807		340
		807	\$	
Bonus settled in shares of common stock	\$		\$	364

EVERSPIN TECHNOLOGIES, INC. Notes to Financial Statements

1. Organization and Operations

Everspin Technologies, Inc. (the Company) was incorporated in Delaware on May 16, 2008. The Company's magnetoresistive random access memory (MRAM) solutions offer the persistence of non-volatile memory with the speed and endurance of random access memory (RAM) and enable the protection of mission critical data particularly in the event of power interruption or failure. The Company's MRAM solutions allow its customers in key markets, such as industrial, medical, automotive/transportation, aerospace, and data center, to design high performance, power-efficient and reliable systems without the need for bulky batteries or capacitors.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of the financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, fair value of assets and liabilities, inventory net realizable value, product warranty reserves, deferred tax assets and related valuation allowances, and stock-based compensation. The Company believes its estimates and assumptions are reasonable; however, actual results may differ from the Company's estimates.

Segments

The Company's chief operating decision maker is its Chief Executive Officer who reviews financial information for purposes of allocating resources and evaluating financial performance for the entire Company. As a result, the Company has single operating and reportable segment.

Cash and Cash Equivalents

The Company considers all highly liquid, short-term investments with maturity dates of 90 days or less at the date of purchase to be cash equivalents. The Company's cash equivalents consist solely of money market funds.

Accounts Receivable, Net

Accounts receivable are recorded at the invoiced amount and do not bear interest. The Company generally does not require collateral or other security in support of accounts receivable. Allowances would be provided for individual accounts receivable when the Company becomes aware of a customer's inability to meet its financial obligations, such as in the case of bankruptcy, deterioration in the customer's operating results or change in financial position. If circumstances related to customers change, estimates of the recoverability of receivables would be further adjusted. The Company also considers a number of factors in evaluating the sufficiency of its allowance for doubtful accounts, including the length of time receivables are past due, significant one-time events, creditworthiness of customers and historical experience. Account balances would be charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. The Company's evaluation determined that no material allowance for doubtful accounts was necessary at December 31, 2022 and 2021.

The unbilled accounts receivable is an estimate of consideration to which the Company expects to be entitled for uses of the Company's intellectual property. Certain customers report on a lagged basis and actual information is not available timely. The estimates recorded are based on historical trends in the customer's usage and current market conditions. At December 31, 2022 and 2021, the unbilled accounts receivable balance was \$551,000 and \$450,000, respectively.

The Company establishes an allowance for product returns. The Company analyzes historical returns, current economic trends and changes in customer demand and acceptance of products when evaluating the adequacy of sales returns. Returns are processed as credits on future purchases and, as a result, the allowance is recorded against the

balance of trade accounts receivable. In addition, the Company from time to time may establish an allowance for estimated price adjustments related to its distributor agreements. The Company estimates credits to distributors based on the historical rate of credits provided to distributors relative to sales and evaluation of current market conditions. At December 31, 2022 and 2021, the allowance for product returns and price adjustments was \$384,000 and \$397,000, respectively.

Accounts receivable, net consisted of the following (in thousands):

	December 31,		
	 2022		2021
Trade accounts receivable	\$ 10,498	\$	8,140
Unbilled accounts receivable	551		450
Allowance for product returns and price adjustments	 (384)		(397)
Accounts receivable, net	\$ 10,665	\$	8,193

Concentration of Credit Risk

Financial instruments that potentially expose the Company to a concentration of credit risk consist principally of cash and cash equivalents that are held by a financial institution in the United States and accounts receivable. Amounts on deposit with a financial institution may at times exceed federally insured limits. The Company maintains its cash accounts with high credit quality financial institutions and accordingly, minimal credit risk exists with respect to the financial institutions.

Significant customers are those which represent more than 10% of the Company's total revenue or net accounts receivable balance at each respective balance sheet date. For the purposes of this disclosure, the Company defines "customer" as the entity that is purchasing the products or licenses directly from the Company, which includes the distributors of the Company's products in addition to end customers that the Company sells to directly. For each significant customer, revenue as a percentage of total revenue and accounts receivable as a percentage of total accounts receivable, net are as follows:

	Revenue Year Ended December 31,		Accounts Re December	
Customers	2022	2021	2022	2021
Customer A	18 %	22%	30 %	54 %
Customer B	15 %	*%	18 %	* %
Customer C	11 %	*%	* %	* %

* Less than 10%

Inventory

Inventory is valued at the lower of cost, using the first-in, first-out or net realizable value. The carrying value of inventory is adjusted for excess and obsolescence based on the Company's evaluation which takes into consideration historical and expected future demand, the effect new products may have on the sale of existing products, technological obsolescence, and other factors including inventory age and shipment. At the point of loss recognition, a new lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that new cost basis.

Fair Value of Financial Instruments

Fair value is defined as an exit price, representing the amount that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. The framework for measuring fair value provides a three-tier hierarchy prioritizing inputs to valuation techniques used in measuring fair value as follows:

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

Level 2— Inputs, other than quoted prices for identical assets or liabilities in active markets, which are observable either directly or indirectly; and

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

The carrying value of accounts receivable, accounts payable, and other accruals readily convertible into cash approximate fair value because of the short-term nature of the instruments. As of December 31, 2022, based on Level 2 inputs and the borrowing rates available to the Company for loans with similar terms and consideration of the Company's credit risk, the carrying value of the Company's variable interest rate debt, excluding unamortized debt issuance costs, approximates fair value. The Company's financial instruments consist of Level 1 assets and a Level 3 liability. Where quoted prices are available in an active market, securities are classified as Level 1. Level 1 assets consist of highly liquid money market funds that are included in cash equivalents. The Company's Level 3 liability consists of warrants issued in connection with the 2019 Credit Facility (as defined in Note 6). The change in the fair value of the warrant liability during the year ended December 31, 2022 was immaterial.

The following tables sets forth the fair value of the Company's financial assets and liabilities measured at fair value on a recurring basis (in thousands):

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	\$ 26,812	\$	\$	\$ 26,812
Total assets measured at fair value	\$ 26,812	\$	\$	\$ 26,812
Liabilities:				
Warrant liability	\$	\$	\$ 27	\$ 27
Total liabilities measured at fair value	\$	\$	\$ 27	\$ 27
		Decembe	er 31, 2021	
	Level 1	Decembe Level 2	er 31, 2021 Level 3	Total
Assets:	Level 1		/	Total
Assets: Money market funds	Level 1 \$ 21,508		/	Total \$ 21,508
		Level 2	/	
Money market funds	\$ 21,508	Level 2	Level 3	\$ 21,508
Money market funds Total assets measured at fair value	\$ 21,508	Level 2	Level 3	\$ 21,508

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation begins at the time the asset is placed in service. Maintenance and repairs are charged to operations as incurred. Depreciation is computed using the straight-line method over the following estimated useful lives of the assets:

	Useful Lives
Computer and network equipment	2 years
Manufacturing equipment	2-7 years
Furniture and fixtures	7 years
Software	3 years
Leasehold improvements	Lesser of useful life of the asset or the remaining lease term

Costs incurred to develop software for internal use during the application development phase are capitalized and amortized over such software's estimated useful life. Costs related to the design or maintenance of internal-use software are included in operating expenses as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in operations. Amortization expense of assets acquired through finance leases is included in the statements of income and comprehensive income.

Impairment of Long-lived Assets

The Company evaluates its long-lived assets, including property and equipment, at the asset group level, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. If such events or changes in circumstances occur, for purposes of this assessment, long-lived assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. Recoverability of these assets is measured by comparison of the carrying amount of each asset group to the future undiscounted cash flows the asset group is expected to generate over its remaining life. If the asset group is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. There have been no impairments of the Company's long-lived assets during either of the periods presented.

Leases

The Company leases office, lab, manufacturing space and equipment in various locations with initial lease terms of up to seven years. These leases require monthly lease payments that may be subject to annual increases throughout the lease term. The terms of these leases also include renewal options at the election of the Company to renew or extend the lease for a range of an additional two to five years. These optional periods have not been considered in the determination of the right-of-use-assets (ROU) or lease liabilities associated with these leases as the Company did not consider it reasonably certain it would exercise the options.

The Company determines if an arrangement is a lease at inception. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. The classification of the Company's leases as operating or finance leases along with the initial measurement and recognition of the associated ROU assets and lease liabilities is performed at the lease commencement date. The measurement of lease liabilities is based on the present value of future lease payments over the lease term. The Company uses its incremental borrowing rate, based on the information available at commencement date, to determine the present value of lease payments when its leases do not provide an implicit rate. The Company uses the implicit rate when readily determinable. The ROU asset is based on the measurement of the lease liability, includes any lease payments made prior to or on lease commencement and excludes lease incentives and initial direct costs incurred, as applicable. Lease expense for the Company's operating leases is recognized on a straight-line basis over the shorter of the useful life of the asset or the lease term and interest expense associated with finance leases is recognized on the balance of the lease liability using the effective interest method based on the estimated incremental borrowing rate.

The Company has lease agreements with lease and non-lease components. The Company has elected to not separate lease and non-lease components for any leases involving real estate and office equipment classes of assets and, as a result, accounts for the lease and non-lease components as a single lease component. The Company has elected to separate lease and non-lease components for any leases involving manufacturing facility classes of assets. Further, the Company elected the short-term lease exception policy, permitting it to not apply the recognition requirements of this standard to leases with terms of 12 months or less (short-term leases) for all classes of assets. As of December 31, 2022, the Company did not have any short-term leases.

Operating leases are included in right-of-use assets, lease liabilities, and lease liabilities, net of current portion in the Company's balance sheet. Finance leases are immaterial.

Debt Issuance Costs

The Company defers and amortizes issuance costs, underwriting fees, end of term payments, and related expenses incurred in connection with the issuance of debt instruments using the effective interest method over the terms of the respective instruments. Debt issuance costs are reflected as a direct reduction of the carrying amount of the related debt liability.

Revenue Recognition

The Company recognizes revenue when a customer obtains control of the promised products or services, in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. Revenue is recognized net of allowances for returns and price adjustments, and any taxes imposed on specific revenue-producing transactions, which are subsequently remitted to governmental authorities.

Nature of Products and Services

The Company's revenue is derived from the sale of MRAM-based products in discrete unit form, licenses of and royalties on its MRAM and magnetic sensor technology, the sale of backend foundry services and design services to third parties. Sales of products in discrete unit form are recognized at a point in time, revenue related to licensing agreements is recognized when the Company has delivered control of the technology, revenue related to royalty agreements is recognized in the period in which sales generated from products sold using the Company's technology occurs, sales of backend foundry services are recognized over time, and design services to third parties are recognized either at a point in time or over time, depending on the nature of the services.

Product Revenue

For products sold in their discrete form, the Company either sells its products directly to original equipment manufacturers (OEMs), original design manufacturers (ODMs) and contract manufacturers (CMs), or through a network of distributors, who in turn sell to those customers. For sales directly to OEMs, ODMs and CMs, revenue is recognized when the OEM, ODM or CM obtains control of the product, which occurs at a point in time, generally upon shipment to the customer. Contracts for sales of products are generally less than one year.

From time to time, the Company may provide distributors with price adjustments subsequent to the delivery of product to them and such amounts are dependent on the end customer and product sales price. Price adjustments can be based on a variety of factors, including customer, product, quantity, geography, and competitive differentiation. Price protection rights grant distributors the right to a credit in the event of declines in the price of the Company's products. Under these circumstances, the Company remits back to the distributor a portion of their original purchase price after the resale transaction is completed in the form of a credit against the distributors' outstanding accounts receivable balance. The credits are on a per unit basis and are not given to the distributor until the distributor provides information regarding the sale to their end customer. The Company estimates these credits and record such estimates in the same period the related revenue is recognized, resulting in a reduction of product revenue and the establishment of an allowance for price adjustments for amounts due to distributors. The Company estimates credits to distributors based on the historical rate of credits provided to distributors relative to sales and evaluation of current market conditions. Revenue on shipments to distributors is recorded when control of the products has been transferred to the distributor.

The Company estimates the amount of our product sales that may be returned by its customers and records this estimate as a reduction of revenue in the period the related product revenue is recognized. The Company estimates its product return liability by analyzing its historical returns, current economic trends and changes in customer demand and acceptance of products. The Company has received insignificant returns to date and believes that returns of its products will continue to be minimal.

Upon the transfer of control, generally at shipment, the Company records a trade receivable for the selling price as there is a legally enforceable obligation of the distributor to pay for the product delivered, an allowance is recorded for the estimated discount that will be provided to the distributor, and the net of these amounts is recorded as revenue on the statements of income and comprehensive income.

License Revenue

For licenses of technology, recognition of revenue is dependent upon whether the Company has delivered rights to the technology, and whether there are future performance obligations under the contract. In some instances, the license agreements call for future events or activities to occur in order for milestones amounts to become due from the customer. The terms of such agreements include payment to the Company of one or more of the following: non-refundable upfront fees; and royalties on net sales of licensed products. Historically, these license agreements have not included other future performance obligations for the Company once the license has been transferred to the customer.

Revenue from non-refundable upfront payments is recognized when the license is transferred to the customer and the Company has no other performance obligations.

The Company entered into a contractual agreement with a customer in 2021 for the development of a RAD-Hard product, consisting of a technology license, a design license agreement and development contract, and a separate contractual agreement with a customer in 2022 for the development of a strategic radiation hardened field programmable gate array product, consisting of a technology license to provide design and development services under the contractual agreement. The Company applies a five-step approach in determining the amount and timing of revenue to be recognized: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when the performance obligation is satisfied.

The Company concluded these contractual arrangements represent one arrangement and evaluated its promises to the customer and whether the performance obligations granted under the arrangement were distinct. The licenses provided to the customer are not transferable, are of limited value without the promised development services, and the customer cannot benefit from the license agreements without the specific obligated services in the development subcontract, as there is strong interdependency between the licenses and the development subcontract. Accordingly, the Company determined the licenses were not distinct within the context of the contract and combined the license with other performance obligations.

As a result, the Company is recognizing revenue related to the performance obligations over the duration of the contract using the input method based on costs incurred to date relative to the total expected costs of the contract over the contract period.

Patents

In an effort to monetize on its intellectual property, the Company may sell patents to customers. The performance obligations are satisfied at the point in time at which the customer obtains control of the patents.

Royalties

Revenue from sales-based royalties from licenses of the Company's technology are recognized at the later of when (1) the sale occurs or (2) the performance obligation to which some or all of the sales-based royalty has been allocated is satisfied (in whole or in part). The Company will record an unbilled receivable (within accounts receivable, net) for the portion of sales-based royalties that have been earned, but not invoiced at the end of each reporting period.

Other Revenue

For certain revenue streams, the Company recognizes revenue based on the pattern of transfer of the services. The Company uses the input method of measuring costs incurred to date compared to total estimated costs to be incurred under the contract as this method most faithfully depicts its performance. The Company will record an unbilled receivable (within accounts receivable, net) for the portion of the work that has been completed but not invoiced at the end of each reporting period.

At the inception of each agreement that includes milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price by using the most likely amount method. If it is probable that a significant reversal of cumulative revenue would not occur, the associated milestone value is included in the transaction price. At the end of each subsequent reporting period, the Company re-evaluates the probability or achievement of each such milestone and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Product Warranty

The Company generally sells products with a limited warranty of product quality and a limited indemnification of customers against intellectual property infringement claims related to the Company's products. The Company accrues for known warranty and indemnification issues if a loss is probable and can be reasonably estimated and accrues for estimated losses incurred for unidentified issues based on historical experience. A warranty liability was not recorded at December 31, 2022 and 2021, as the estimated future warranty costs were not material based on the Company's historical experience.

Research and Development

Research and development expenses are incurred in support of internal development programs or as part of the Company's joint development agreement with GLOBALFOUNDRIES (see Note 10). Research and development expenses include personnel-related costs (including stock-based compensation), circuit design costs, purchases of materials and laboratory supplies, fabrication and packaging of experimental integrated circuit products, depreciation of research and development related capital equipment and overhead and are expensed as incurred.

Stock-based Compensation

Stock-based compensation arrangements include stock option grants and restricted stock unit (RSU) awards under the Company's equity incentive plans, as well as shares issued under the Company's Employee Stock Purchase Plan (ESPP), through which employees may purchase the Company's common stock at a discount to the market price.

The Company measures its stock option grants based on the estimated fair value of the options as of the grant date using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the requisite service period using the straight-line method. The Company accounts for forfeitures as they occur.

Expected volatility. The Company determines the expected stock price volatility based on the historical volatility of its common stock and the historical volatilities of a peer group. Industry peers consist of several public companies in the technology industry similar in size, stage of life cycle and financial leverage. If circumstances change such that the identified companies are no longer similar, the Company will revise its peer group to substitute more suitable companies in this calculation.

Risk-free interest rate. The risk-free interest rate is based on the U.S. Treasury yield with a maturity equal to the expected term of the option in effect at the time of grant.

Expected term. The expected term represents the period that the stock-based awards are expected to be outstanding. The Company used the simplified method to determine the expected term, which is calculated as the average of the time to vesting and the contractual life of the options.

Dividend yield. The Company has never paid dividends on its common stock and is prohibited from paying dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Income Taxes

The Company uses the liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial reporting and the tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company must then assess the likelihood that the resulting deferred tax assets will be realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company recognizes benefits of uncertain tax positions if it is more likely than not that such positions will be sustained upon examination based solely on their technical merits, as the largest amount of benefit that is more likely than not to be realized upon the ultimate settlement. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of income tax expense or benefit.

Net Income per Common Share

Basic net income per common share is calculated by dividing the net income by the weighted-average number of shares of common stock outstanding for the period less shares subject to repurchase, without consideration of potentially dilutive securities. Diluted earnings per share is calculated using the treasury stock method by dividing net income by the total weighted average shares of common stock outstanding in addition to the potential impact of dilutive securities including restricted stock units, warrants, and options. In periods with a net loss, diluted net loss per common share is the same as basic net loss per common share since the effect of potentially dilutive securities is anti-dilutive.

Recently Issued Pronouncements

In June 2016, the Financial Accounting Standards Board (FASB) issued ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which amends the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. As the Company is a smaller reporting company, ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2022, and requires a cumulative effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. In April 2019, the FASB issued ASU No. 2019-04, Codification Improvements Financial Instruments-Credit Losses (Topic 326). ASU No. 2019-04 provides narrow-scope amendments to help apply ASU No. 2016-13, and is effective with the adoption of ASU No. 2016-13. The Company is evaluating the impact of the adoption of ASU 2016-13 and ASU No. 2019-04 on its financial statements.

Subsequent Events

The Company evaluated events after December 31, 2022, and through the date the financial statements were issued, and determined any events or transactions occurring during this period that would require recognition or disclosure are appropriately addressed in these financial statements.

3. Revenue

The Company sells products to its distributors and OEMs. The Company also recognizes revenue under licensing, patent, and royalty agreements with some customers. The following table presents the Company's revenues disaggregated by sales channel (in thousands):

	Year Ended December 31,			
	 2022			
Distributor	\$ 50,943		36,479	
Non-distributor	9,042		18,667	
Total revenue	\$ 59,985	\$	55,146	

The following table presents the Company's revenues disaggregated by timing of recognition (in thousands):

	Year Ended De			
	2022		2021	
Point in time	\$ 56,675		51,204	
Over time	3,310		3,942	
Total revenue	\$ 59,985	\$	55,146	

The following table presents the Company's revenues disaggregated by type (in thousands):

	Year Ended December 31,				
	2022		2021		
Product sales	\$ 55,032	\$	43,931		
Licensing	1,937		3,326		
Royalties	1,414		2,021		
Patents			5,250		
Other revenue	1,602		618		
Total revenue	\$ 59,985	\$	55,146		

In September 2021, the Company entered into an intellectual property monetization deal to sell five patents to a customer for a total contract value of \$5.25 million. Two of the patents were assigned to the customer in September 2021, and the remaining three patents were assigned to the customer in October 2021. Control is transferred when the patents are assigned to the customer. As a result, all \$5.25 million of patent revenue was recognized during the year ended December 31, 2021, related to the patent sales. There were no patent sales for the year ended December 31, 2022.

The Company licenses its intellectual property and is entitled to consideration based on the customer's sales. The Company makes estimates in instances when the customer reports sales on a lagged basis and actual information is not available timely. The estimates are based on historical trends in the customer's activity and current market conditions. In the year ended December 31, 2022, the Company recognized \$0.3 million of royalty revenue related to activity occurring in the year ended December 31, 2021. In the year ended December 31, 2021, the Company recognized \$0.8 million of royalty revenue related to activity occurring in the year ended December 31, 2020. This is a change in estimate and is based on actual information received from the customer. The amounts are reported in licensing, royalty, patent and other revenue in the statements of income and comprehensive income.

The Company recognizes revenue in three geographic regions: Asia-Pacific (APAC); North America; and Europe, Middle East and Africa (EMEA). We recognize revenue by geography based on the region in which our products are sold, and not to where the end products in which they are assembled are shipped. Our revenue by region for the periods indicated was as follows (in thousands):

	Year Ended December 31,				
	2022		2021		
APAC	\$ 35,631	\$	32,327		
North America	14,533		15,813		
EMEA	 9,821		7,006		
Total revenue	\$ 59,985	\$	55,146		

4. Balance Sheet Components

Inventory

Inventory consisted of the following (in thousands):

	December 31,			
	 2022	2021		
Raw materials	\$ 666	\$	464	
Work-in-process	4,746		4,620	
Finished goods	 1,271		1,312	
Total inventory	\$ 6,683	\$	6,396	

Property and Equipment, Net

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

	D	December 31,
	2022	2 2021
Manufacturing equipment	\$ 16,1	130 \$ 12,608
Computer and network equipment	1,1	124 1,008
Furniture and fixtures	1	187 187
Software	9	929 929
Leasehold improvements	1,4	1,444
Total property and equipment, gross	19,8	814 16,176
Less: accumulated depreciation	(15,9	931) (15,203)
Total property and equipment, net	\$ 3,8	883 \$ 973

Depreciation and amortization expense during the years ended December 31, 2022 and 2021 was \$1.0 million and \$1.5 million, respectively.

Accrued Liabilities

Accrued liabilities consisted of the following (in thousands):

	December 31,			
	2022	2021		
Payroll-related expenses	\$ 2,886	\$	2,845	
Inventory	185		177	
Other	 462		557	
Total accrued liabilities	\$ 3,533	\$	3,579	

Deferred Revenue

During the year ended December 31, 2021, the Company executed contractual arrangements with a customer for the development of a RAD-Hard product, consisting of a technology license, design license agreement and development subcontract (RAD-Hard 1). The Company does not share in the rights to future revenues or royalties. The total arrangements are for \$6.5 million in consideration.

The Company concluded these contractual arrangements represent one arrangement and evaluated its promises to the customer and whether the performance obligations granted under the arrangement were distinct. The licenses provided to the customer are not transferable, are of limited value without the promised development services, and the customer cannot benefit from the license agreements without the specific obligated services in the development subcontract, as there is strong interdependency between the licenses and the development subcontract. Accordingly, the Company determined the licenses were not distinct within the context of the contract and combined the license with other performance obligations. The total transaction price of \$6.5 million was allocated to the single performance obligation.

The Company recognizes revenue related to the performance obligations over time using the input method based on costs incurred to date relative to the total expected costs of the contract and began recognizing revenue in the second quarter of 2021 over the contract period. This method depicts performance under the contract and requires the Company to make estimates about the future costs expected to be incurred to perform under the contact, including labor and material costs.

As of December 31, 2022, the Company has billed \$5.8 million for the performance under the RAD-Hard 1 contractual agreements. Under the input method of recognition, the Company has recognized \$1.7 million in revenue for the year ending December 31, 2022, and \$5.0 million in revenue since inception of the contractual agreements. As a result, the Company has recorded \$0.8 million in deferred revenue as of December 31, 2022. The Company expects to

recognize the remaining \$1.5 million of the transaction price as services are performed throughout the contractual period and performance is expected to be complete in the year ended December 31, 2024.

During the year ended December 31, 2022, the Company executed a contractual arrangement with a customer for the development of a strategic radiation hardened field programmable gate array product, consisting of a technology license to provide design and development services under the contractual agreement (RAD-Hard 2). The Company does not share in the rights to future revenues or royalties. The total arrangement is for \$6.5 million in consideration and services are expected to be performed through the year ended December 31, 2024, subject to certain termination and extension provisions defined in the arrangement. The accounting for this contract follows the same revenue recognition as the RAD-Hard 1 contractual agreements. For the year ended December 31, 2022, the Company has billed \$0.3 million for the performance under the RAD-Hard 2 contractual agreement. Under the input method of recognition, the Company has recognized \$0.3 million in revenue for the year ending December 31, 2022. As a result, the Company does not have a deferred revenue balance as of December 31, 2022 related to the RAD-Hard 2 contractual agreement.

5. Commitments and Contingencies

Leases

Operating leases consist of fabrication, lab, and office space expiring at various dates through 2029. Finance leases relate to a server lease expiring in January 2025. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The undiscounted future non-cancellable lease payments under the Company's operating and finance leases were as follows (in thousands):

As of December 31, 2022	Amount
2023	\$ 1,396
2024	1,411
2025	1,416
2026	1,431
2027	1,314
Thereafter	566
Total lease payments	7,534
Less: imputed interest	(832)
Total lease liabilities	6,702
Less: current portion of lease liabilities	(1,122)
Total lease liabilities, net of current portion	\$ 5,580

Other information related to the Company's operating lease liabilities was as follows:

	December	31,
	2022	2021
Weighted-average remaining lease term (years)	5.35	1.08
Weighted-average discount rate	4.50 %	6.00 %

Other information related to the Company's finance lease liabilities was as follows:

	December	r 31,
	2022	2021
Weighted-average remaining lease term (years)	2.09	
Weighted-average discount rate	4.50 %	%

Lease costs for the Company's operating leases were \$1.4 million and \$1.5 million for the years ended December 31, 2022 and 2021, respectively. Lease costs for the Company's finance lease were immaterial for the years ended December 31, 2022 and 2021.

Legal Proceedings

From time to time, the Company may become involved in legal proceedings arising from the ordinary course of its business. Management is currently not aware of any matters that it expects will have a material adverse effect on the financial position, results of operations or cash flows of the Company.

Indemnifications

In the ordinary course of business, the Company enters into agreements that may include indemnification provisions. Pursuant to such agreements, the Company may indemnify, hold harmless and defend an indemnified party for losses suffered or incurred by the indemnified party. Some of the provisions will limit losses to those arising from third party actions. In some cases, the indemnification will continue after the termination of the agreement. The maximum potential amount of future payments the Company could be required to make under these provisions is not determinable. The Company has never incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. The Company has also entered into indemnification agreements with its directors and officers that may require the Company to indemnify its directors and officers against liabilities that may arise by reason of their status or service as directors or officers to the fullest extent permitted by Delaware corporate law. The Company currently has directors' insurance.

6. Debt

In May 2017, we executed the 2017 Credit Facility with SVB for a \$12.0 million term loan, which we subsequently amended in January 2019 and June 2019. In August 2019, the 2019 Credit Facility amended and restated the 2017 Credit Facility, providing for a Line of Credit and the 2019 Term Loan with SVB to refinance in full the outstanding principal balance of \$8.0 million under the 2017 Credit Facility.

In July 2020, we executed the first amendment to the 2019 Credit Facility with SVB. The amendment, among other things, extended the initial 12-month interest-only period for the term loan to a 16-month interest-only period and lowered the floor interest rate. The floor interest rates for 2019 Term Loan and the Line of Credit Facility were reduced from 4.75% and 6.75% to 3.75% and 4.75%, respectively.

The amended Line of Credit allows for a maximum draw of \$5.0 million, subject to a formula borrowing base, has a two-year term and bears interest at a floating rate equal to the WSJ prime rate plus 1.5%, per annum, subject to a floor of 4.75%. As of December 31, 2022, the interest rate was 9.00%. The Line of Credit required a commitment fee of 1.6% of the maximum availability of the Line of Credit, which was paid in August 2019 upon closing, and was accounted for as a debt discount. The Line of Credit also provides for a termination fee equal to 1% of the maximum availability under the Line of Credit, which is due in case of a termination of the Line of Credit prior to the scheduled maturity date, and an unused facility fee equal to 0.125% per annum of the average unused portion of the Line of Credit, which is expensed as incurred. Currently, \$4.0 million remains available under the Line of Credit was 9.36% and the outstanding balance was \$1.0 million. The Line of Credit was set to mature on August 5, 2022. The third amendment entered into on July 22, 2022, extended the maturity date of the Line of Credit to August 5, 2023.

The amended 2019 Term Loan provides for a \$6.0 million term loan. The amended 2019 Term Loan has a term of 46 months, and a 16-month interest-only period followed by 30 months of equal principal payments of \$200,000 per month, plus accrued interest. The 2019 Term Loan bears interest at a floating rate equal to the WSJ prime rate minus 0.75%, subject to a floor of 3.75%. As of December 31, 2022, the interest rate was 6.75%. A final payment of 7% of the original principal amount of the 2019 Term Loan must be made when the 2019 Term Loan is prepaid or repaid, whether at maturity or as a result of a prepayment or acceleration or otherwise. The additional payment, which is accounted for as a debt discount, is being accreted using the effective interest method. The 2019 Term Loan has a prepayment fee equal to 2% of the total commitment, which is due only if the 2019 Term Loan is prepaid prior to the scheduled maturity date for any reason. As of December 31, 2022, the effective interest rate under the 2019 Term Loan was 6.94% and the outstanding balance was \$1.6 million. The 2019 Term Loan matures on June 1, 2023.

Collateral for the 2019 Credit Facility includes all of our assets except for intellectual property. We are required to comply with certain covenants under the 2019 Credit Facility, including requirements to maintain a minimum cash balance and availability under the Line of Credit, and restrictions on certain actions without the consent of the lender,

such as limitations on our ability to engage in mergers or acquisitions, sell assets, incur indebtedness, or grant liens or negative pledges on our assets, make loans or make other investments. Under these covenants, we are prohibited from paying cash dividends with respect to our capital stock. We were in compliance with all covenants at December 31, 2022.

The carrying value of the Company's 2019 Credit Facility at December 31, 2022, was as follows (in thousands):

	(Current	Lo	ng-Term	
]	Portion		Debt	Total
Credit Facility	\$	2,620	\$		\$ 2,620
Unamortized debt discounts		(26)			(26)
Net carrying value	\$	2,594	\$		\$ 2,594

The carrying value of the Company's 2019 Credit Facility at December 31, 2021, was as follows (in thousands):

	Current Portion	L	ong-Term Debt	Total
Credit Facility	\$ 3,400	\$	1,620	\$ 5,020
Unamortized debt discounts	(30)		(91)	(121)
Net carrying value	\$ 3,370	\$	1,529	\$ 4,899

The table below includes the principal repayments due under the 2019 Credit Facility as of December 31, 2022 (in thousands):

	Principal Repaymen as of December 31, 2022	i
2023	\$ 2,620)
Total principal repayments	\$ 2,620)

7. Stockholders' Equity

Common Stock

Common stockholders are entitled to dividends if and when declared by the board of directors. As of December 31, 2022, no dividends on common stock had been declared by the board of directors.

Reserved Shares of Common Stock

The Company had reserved shares of common stock for future issuance as follows:

	Decem	ber 31,
	2022	2021
Options issued and outstanding	1,994,726	1,783,298
Shares available for future option grants	689,472	1,038,956
RSUs subject to future vesting	656,646	384,307
Common stock warrants	18,461	27,836
Total	3,359,305	3,234,397

Warrants

In connection with the Company's prior credit facility with Ares Venture Finance entered into in June 2015, the Company issued Ares Venture Finance a warrant to purchase 18,461 shares of the Company's common stock at an exercise price of \$26.00 per share. The warrant can be exercised at any time and expires on June 5, 2025.

8. Stock-Based Compensation

2016 Employee Incentive Plan

The Company's board of directors adopted the 2016 Equity Incentive Plan (the 2016 Plan) on April 25, 2016, which was subsequently approved on September 20, 2016 by the Company's stockholders. The 2016 Plan became effective on October 7, 2016, the date the Company's S-8 registration statement relating to the 2016 Plan was declared effective by the SEC.

The Company's 2016 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation to employees, directors, and consultants. In addition, the Company's 2016 Plan provides for the grant of performance cash awards to employees, directors, and consultants.

The maximum number of shares of common stock that may be issued under the Company's 2016 Plan was initially 500,000 subject to an automatic increase on January 1 of each year, beginning on January 1, 2017, and continuing through and including January 1, 2026, by 3% of the total number of shares of capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by the Company's board of directors. On May 20, 2021, the Company's stockholders approved an amendment to the 2016 Plan to increase the total number of authorized shares of common stock available for grant thereunder by an additional 550,000 shares. At December 31, 2022, of the 3,261,836 shares of common stock reserved and available for grant under the 2016 Plan, 689,472 shares of common stock remain available for grant under the 2016 Plan.

2008 Employee Incentive Plan

The 2008 Equity Incentive Plan (the 2008 Plan) provided for the issuance of incentive stock options (ISO), nonqualified stock options, and other stock compensation awards.

Due to the adoption of the 2016 Plan, no further grants will be made under the Company's 2008 Plan. However, any outstanding stock awards granted under the 2008 Plan will remain outstanding, subject to the terms of the Company's 2008 Plan and the applicable stock award agreements, until such outstanding stock awards that are stock options are exercised or until they terminate or expire by their terms, or until such stock awards are fully settled, terminated, or forfeited. At December 31, 2022, 51,695 options under the 2008 Plan remained outstanding.

Summary of Stock Option Activity

The following table summarizes the stock option and award activity for all grants under the 2008 Plan and 2016 Plan:

		Options Outstanding					
	Options and Awards Available for Grant	Number of Options	Av Ex Pr	ighted- verage xercise ice Per Share	Weighted- Average Remaining Contractual Life (years)]	ggregate Intrinsic Value thousands)
Balance—December 31, 2021	1,038,956	1,783,298	\$	5.21	8.0	\$	10,891
Authorized	595,753						
RSUs granted	(620,218)						
RSUs cancelled/forfeited	25,312						
Options granted	(489,244)	489,244	\$	8.17			
Options exercised		(116,040)	\$	4.71		\$	333
Options cancelled/forfeited	138,913	(161,776)	\$	6.18			
Balance—December 31, 2022	689,472	1,994,726	\$	5.88	7.8	\$	1,275
Options exercisable—December 31, 2022		919,508	\$	5.38	6.9	\$	809

During the years ended December 31, 2022 and 2021, the Company granted options with a weighted-average grant date fair value of \$5.40 and \$3.60 per share, respectively.

The total fair value of options vested during the year was \$1.3 million and \$0.9 million, for the years ended December 31, 2022, and 2021, respectively.

As of December 31, 2022, there was \$3.8 million of total unrecognized compensation expense related to unvested options which is expected to be recognized over a weighted-average period of 2.4 years. Compensation cost capitalized within inventory at December 31, 2022 and 2021 was not material.

The Company estimated the fair value of each option grant using the Black-Scholes option-pricing model. The fair value of employee stock options is being amortized on a straight-line basis over the requisite service period of the awards. The fair value of employee stock options was estimated using the assumptions below.

	Year Ended December 31,
	2022 2021
Expected volatility	73.7 - 74.1 % 72.6 - 74.1 %
Risk-free interest rate	2.13 - 2.93 % 0.62 - 1.30 %
Expected term (in years)	6.05 - 6.08 5.89 - 6.08
Dividend yield	<u> </u>

2016 Employee Stock Purchase Plan

The Company's board of directors adopted the 2016 Employee Stock Purchase Plan (the ESPP) on April 25, 2016, which was subsequently approved on September 20, 2016 by the Company's stockholders. The Company had 774,137 shares available for issuance under the Company's ESPP as of December 31, 2022. Employees purchased 77,221 shares for \$342,000 during the year ended December 31, 2022 and 64,407 shares for \$236,000 during the year ended December 31, 2022.

The following table summarizes the assumptions used in the Black-Scholes option-pricing model to determine fair value of the Company's common shares issued under the ESPP:

	Year Er Decembe	
	2022	2021
Expected volatility	40.7 - 95.6 %	40.7 - 100.7 %
Risk-free interest rate	0.06 - 4.46 %	0.05 - 0.13 %
Expected term (in years)	0.5 - 1.0	0.5 - 1.0
Dividend yield	<u> </u>	%

Restricted Stock Units

In September 2017, the Company's board of directors authorized the issuance of restricted stock units (RSUs), under the 2016 Plan and adopted a form of Restricted Stock Unit Award Agreement, which is intended to serve as a standard form agreement for RSU grants issued to employees, executive officers, directors, and consultants. The fair value of the RSUs is recognized as expense ratably over the vesting period, as determined by the board of directors on the date of grant.

The following table summarizes RSU activity for the year ended December 31, 2022:

	RSUs Out	RSUs Outstanding			
	Number of Restricted Stock Units	A Gra Fair	eighted- verage ant Date Value Per Share		
Balance—December 31, 2021	384,307	\$	5.00		
Granted	620,218	\$	7.11		
Vested	(322,567)	\$	6.04		
Cancelled/forfeited	(25,312)	\$	5.92		
Balance—December 31, 2022	656,646	\$	6.45		

The fair value of RSUs is determined on the date of grant based on the market price of the Company's common stock on that date. As of December 31, 2022, there was \$3.2 million of unrecognized stock-based compensation expense related to RSUs to be recognized over a weighted-average period of 2.4 years. Compensation cost capitalized within inventory at December 31, 2022 and 2021 was not material.

9. 401(k) Plan

The Company has a defined contribution employee benefit plan pursuant to Section 401(k) of the Internal Revenue Code. The plan allows eligible employees to defer a portion of their annual compensation up to certain statutory limits. At the election of the Board of Directors, the Company may elect to match employee contributions but has not done so to date.

10. Significant Agreements

GLOBALFOUNDRIES, Inc. Joint Development Agreement

Since October 17, 2014, the Company has participated in a joint development agreement (JDA) with GLOBALFOUNDRIES Inc. (GF), a semiconductor foundry, for the joint development of Spin-transfer Torque MRAM (STT-MRAM) technology to produce a family of discrete and embedded MRAM technologies. The term of the agreement is until the completion, termination, or expiration of the last statement of work entered into pursuant to the joint development agreement. The agreement was extended on December 31, 2019 to include a new phase of support for 12nm MRAM development.

Under the current JDA extension terms, each party licenses its relevant intellectual property to the other party. For certain jointly developed works, the parties have agreed to follow an invention allocation procedure to determine ownership. In addition, GF possesses the exclusive right to manufacture the Company's discrete and embedded STT-MRAM devices developed pursuant to the agreement until the earlier of three years after the qualification of the MRAM device for a particular technology node or four years after the completion of the relevant statement of work under which the device was developed. For the same exclusivity period associated with the relevant device, GF agreed not to license intellectual property developed in connection with the JDA to named competitors of the Company.

Generally, unless otherwise specified in the agreement or a statement of work, the Company and GF share project costs, which do not include personnel or production qualification costs, under the JDA. If GF manufactures, sells, or transfers to customers wafers containing production quantified STT-MRAM devices that utilize certain design information, GF will be required to pay the Company a royalty.

11. Geographic Information

Property and equipment, net by country was as follows (in thousands):

	 December 31,			
	2022		2021	
United States	\$ 2,335	\$	825	
Singapore	1,459		88	
Singapore Other	89		60	
	\$ 3,883	\$	973	

Revenue from customers is designated based on the geographic region or country to which the product is delivered or the licensee is located. Revenue by country was as follows (in thousands):

	Year Ended December 31,			
		2022		2021
United States	\$	14,585	\$	17,403
Hong Kong		12,820		15,662
Japan		12,442		7,315
Canada		5,670		3,797
Germany		3,839		2,988
China		3,739		2,731
All other		6,890		5,250
Total revenue	\$	59,985	\$	55,146

12. Income Taxes

For the years ended December 31, 2022 and 2021, the Company's provision for income tax consisted of (in thousands):

	Ye	ar Ended I 2022	ber 31, 021
Current:			
Federal	\$		\$
State		14	4
Foreign			
Total Current	\$	14	\$ 4
Deferred:			
Federal	\$		\$
State		_	
Foreign		_	
Total Deferred	\$		\$
Provision for income taxes	\$	14	\$ 4

The reconciliation of the statutory federal income tax rate to the Company's effective tax rate is as follows:

	Year Ended Dec	ember 31,
	2022	2021
Tax at statutory federal rate	21.0 %	21.0 %
State taxes, net of federal benefit	1.9	1.8
Stock-based compensation	4.2	4.7
IRC section 162(m) limitation	1.1	
Change in valuation allowance	(28.0)	(27.5)
Other		0.1
Provision for income taxes	0.2 %	0.1 %

The tax effects of temporary differences and carryforwards that give rise to significant portions of the deferred tax assets are as follows (in thousands):

	Decem	ber 31,
	2022	2021
Deferred tax assets:		
Net operating loss carryforwards	\$ 27,110	\$ 30,658
Inventory	273	278
Accruals	737	801
Depreciation and amortization	27	240
Research and experimental expenditures	2,229	
Stock-based compensation	270	177
Right of use liability	1,477	206
Gross deferred tax assets	32,123	32,360
Valuation allowance	(30,328)	(32,047)
Deferred tax assets	1,795	313
Deferred tax liabilities:		
Right of use asset	(1,463)	(209)
Other	(332)	(104)
Deferred tax liabilities	(1,795)	(313)
Net deferred tax assets	\$	\$

The Company is required to reduce its deferred tax assets by a valuation allowance if it is more likely than not that some or all of its deferred tax assets will not be realized. Management must use judgment in assessing the potential need for a valuation allowance, which requires an evaluation of both negative and positive evidence. The weight given to the potential effect of negative and positive evidence should be commensurate with the extent to which it can be objectively verified. In determining the need for and amount of the valuation allowance, if any, the Company assesses the likelihood that it will be able to recover its deferred tax assets using historical levels of income, estimates of future income and tax planning strategies. As a result of historical cumulative losses, the Company determined that, based on all available evidence, there was substantial uncertainty as to whether it will recover recorded net deferred tax assets as of December 31, 2022 and 2021. The net valuation allowance decreased by \$1.7 million in 2022.

As of December 31, 2022, the Company has federal net operating loss carryforwards of approximately \$119.9 million, of which \$79.1 million will expire in 2028 through 2037 if not utilized, and \$40.8 million that will carryover indefinitely. In addition, the Company has state net operating loss carryforwards of approximately \$50.3 million, of which \$47.5 million will expire in 2028 through 2041 if not utilized, and \$2.8 million that will carryover indefinitely.

The Tax Reform Act of 1986 (the Act) provides for a limitation on the annual use of net operating loss carryforwards following certain ownership changes (as defined by the Act and codified under Section 382 of the U.S. Internal Revenue Code of 1986, as amended (the Code)) that could limit the Company's ability to utilize these carryforwards. Further, a portion of the carryforwards may expire before utilized to reduce future income tax liabilities as a result of the annual limitation. The Company experienced an ownership change in October 2016 and as a result, \$43.8 million (\$9.2 million tax effected) of the federal NOLs are expected to expire unutilized due to limitation under

Section 382 of the Code. The NOLs expected to expire unutilized are included in the NOL carryforward amounts disclosed, subject to a valuation allowance.

The Company files income tax returns in the U.S. federal and various state jurisdictions. The Company is generally subject to U.S. federal and state income tax examination for all tax years beginning in 2008, due to the net operating losses that are carried forward.

A summary of changes in the Company's gross unrecognized tax benefits for the years ended December 31, 2022 and 2021 was as follows (in thousands):

	Yea	Year Ended December 31,			
		2022		2021	
Unrecognized tax expense, beginning of the year	\$	105	\$	104	
Decrease related to prior year tax positions		(16)		(12)	
Increase related to current year tax positions		16	_	13	
Unrecognized tax expense, end of year	\$	105	\$	105	

The total balance of unrecognized tax benefits as of December 31, 2022 would impact the effective tax rate, if recognized.

The Company's policy is to recognize interest and penalties accrued on any unrecognized tax benefit as a component of income tax expense. The Company has accrued penalties and interest of \$155,000, as of both December 31, 2022 and 2021.

13. Net Income Per Common Share

The following table sets forth the computation of basic and diluted net income per share (in thousands, except share and per share amounts):

Basic EPS

	Year Ended December 31,			
		2022		2021
Numerator:				
Net income	\$	6,129	\$	4,343
Denominator:				
Weighted-average shares of common stock outstanding, basic	20	0,130,336		19,400,124
Net income per common share, basic	\$	0.30	\$	0.22

Diluted EPS

	Year Ended December 31,			ember 31,
		2022		2021
Numerator:				
Net income	\$	6,129	\$	4,343
Less: warrant liability fair value gain recognized		(23)		
Net income attributable to common stockholders, diluted	\$	6,106	\$	4,343
Denominator:				
Weighted-average shares of common stock outstanding, basic		20,130,336		19,400,124
Dilutive effect of stock options and RSUs		645,589		572,021
Weighted-average shares of common stock outstanding,			_	
diluted		20,775,925		19,972,145
Net income per common share, diluted	\$	0.29	\$	0.22

The following outstanding shares of potentially dilutive securities outstanding have been excluded from the computation of diluted net income per common share for the periods presented as their inclusion would be anti-dilutive:

	Year Ended	Year Ended December 31,		
	2022	2021		
Options to purchase common stock	841,845	1,221,720		
RSUs	4,147	9,815		
Common stock warrants	18,461	27,836		
Total	864,453	1,259,371		

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

None.

Item 9A. Controls and Procedures.

Evaluation of disclosure controls and procedures.

Our management, with the participation of our management team, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO) evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2022.

Based on this evaluation, our CEO and CFO concluded that, our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2022.

Management's Annual Report on Internal Control Over Financial Reporting

This Annual Report on Form 10-K includes a report of management's assessment regarding internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm because, as a "smaller reporting company", and non-accelerated filer, our independent registered public accounting firm is not required to issue such an attestation report.

The following report is provided by management in respect of our internal control over financial reporting:

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our management used the Committee of Sponsoring Organizations of the Treadway Commission's Internal Control -Integrated Framework (2013), or the COSO framework, to evaluate the effectiveness of internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of our internal control over financial reporting, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of our internal control over financial reporting are not omitted and is relevant to an evaluation of internal control over financial reporting. Management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2022, and has concluded that such internal control over financial reporting was effective.

Changes in internal control over financial reporting.

In prior years, we identified a material weakness in our internal control over financial reporting as of December 31, 2021, relating to our controls around inventory, including unit level cost allocation and communication protocols between operations and accounting.

We remediated this material weaknesses by formalizing systematic improvements over our internal controls in order to reconcile and identify unit pricing variances between each stage of the wafer manufacturing process, to ensure cost allocation amounts are appropriately reflected at both the unit and product family level, establishing multi-discipline controls and processes to enhance communications between operations and accounting, and hiring additional qualified personnel within our accounting and information technology functions to provide oversight of our financial reporting and inventory costing process. After implementing new internal controls and procedures, we concluded that we have remediated the previously identified material weakness as of December 31, 2021.

Except with respect to the remediation actions described above, there have been no other changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2022 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent limitation on the effectiveness of internal control.

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute assurances. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business, but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A in connection with our 2023 Annual Meeting of Stockholders, or the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year ended December 31, 2022, under the headings "Management," "Proposal 1 - Election of Directors," "Board Committees and Meetings," and, to the extent applicable, "Delinquent Section 16(a) Reports," and is incorporated herein by reference.

We have adopted a Code of Business Conduct and Ethics that applies to our officers, directors and employees which is available on our website at www.everspin.com. The Code of Business Conduct and Ethics is intended to qualify as a "code of ethics" within the meaning of Section 406 of the Sarbanes-Oxley Act of 2002 and Item 406 of Regulation S-K. In addition, we intend to promptly disclose (1) the nature of any substantive amendment to our Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller or persons performing similar functions and (2) the nature of any waiver, including an implicit waiver, from a provision of our code of ethics that is granted to one of these specified officers, the name of such person who is granted the waiver and the date of the waiver, on our website in the future.

Item 11. Executive Compensation.

The information required by this item regarding executive compensation is incorporated by reference to the information set forth in the sections titled "Executive Compensation" and "Compensation of Non-Employee Board Members" in our Proxy Statement.

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

The information required by this item regarding security ownership of certain beneficial owners and management is incorporated by reference to the information set forth in the sections titled "Security Ownership of Certain Beneficial Owners and Management" and "Securities Authorized for Issuance Under Equity Compensation Plans" in our Proxy Statement.

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

The information required by this item regarding certain relationships and related transactions and director independence is incorporated by reference to the information set forth in the sections titled "Certain Relationships and Related Party Transactions" and "Corporate Governance", respectively, in our Proxy Statement.

Item 14. Principal Accountant Fees and Services.

The information required by this item regarding principal accountant fees and services is incorporated by reference to the information set forth in the section titled "Principal Accountant Fees and Services" in our Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as part of this report:

1. Financial Statements

Information in response to this Item is included in Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

3. Exhibits

EXHIBIT INDEX

Ť		Incorporation By Reference			
Exhibit Number	Description	Form	SEC File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation.	8-K	001-37900	3.1	10/13/2016
3.1.1	Amendment to Amended and Restated Certificate of Incorporation.	8-K	001-37900	3.1	5/22/2019
3.1.2	Amendment to Amended and Restated Certificate of Incorporation.	8-K	001-37900	3.1	5/27/2020
3.2	Amended and Restated Bylaws.	8-K	001-37900	3.2	5/22/2019
4.1	Form of Common Stock Certificate of the registrant.	S-1	333-213569	4.1	9/09/2016
4.2	Amended and Restated Warrant to Purchase Common Stock, dated as of August 5, 2019, between the registrant and Silicon Valley Bank.	10-Q	001-37900	4.2	11/08/2019
4.3	Warrant to Purchase Common Stock, dated as of July 15, 2020, between the registrant and Silicon Valley Bank.	10-Q	001-37900	4.3	8/06/2020
4.4	Description of Common Stock.	10-K	001-37900	4.4	3/04/2021
10.1†	Form of Indemnity Agreement between the registrant and its directors and officers.	S-1	333-213569	10.1	9/09/2016
10.2†	2008 Equity Incentive Plan, as amended, and Form of Stock Option Grant Notice, Option Agreement and Form of Notice of Exercise.	S-1/A	333-213569	10.2	9/26/2016
10.3†	Amended and Restated 2016 Equity Incentive Plan.	8-K	001-37900	10.1	5/22/2018
10.3.1†	First Amendment to the Amended and Restated 2016 Equity Incentive Plan.	8-K	001-37900	10.1	5/25/2021
10.4†	Form of Stock Option Grant Notice, Option Agreement and Form of Notice of Exercise used with the 2016 Equity Incentive Plan.	S-1/A	333-213569	10.3	9/26/2016
10.5†	Form of Restricted Stock Unit Award Agreement under the 2016 Equity Incentive Plan.	10-Q	001-37900	10.3	11/13/2017
10.6†	2016 Employee Stock Purchase Plan.	S-1/A	333-213569	10.4	9/26/2016

10.7	Lease, dated as of June 6, 2008, by and between the registrant and Freescale Semiconductor, Inc.	S-1	333-213569	10.5	9/09/2016
10.7.1	Amendment No. 1 to Lease, dated as of February 2, 2009, by and between the registrant and Freescale Semiconductor, Inc.	S-1	333-213569	10.6	9/09/2016
10.7.2	Amendment No. 2 to Lease, dated as of February 18, 2010, by and between the registrant and Freescale Semiconductor, Inc.	S-1	333-213569	10.7	9/09/2016
10.7.3	Amendment No. 3 to Lease, dated as of July 20, 2011, by and between the registrant and Freescale Semiconductor, Inc.	S-1	333-213569	10.8	9/09/2016
10.7.4	Amendment No. 4 to Lease, dated as of June, 2014 by and between the registrant and Freescale Semiconductor, Inc.	S-1	333-213569	10.9	9/09/2016
10.7.5	Amendment No. 5 to Lease, dated as of March 22, 2017 by and between the registrant and Freescale Semiconductor, Inc.	8-K	001-37900	10.1	3/28/2017
10.7.6	Amendment No. 6 to Lease, dated as of October 31, 2017 by and between the registrant and NXP USA, Inc. (formerly Freescale Semiconductor, Inc.).	10-К	001-37900	10.40	3/15/2018
10.7.7	Amendment No. 7 to Lease, effective as of June 30, 2018 by and between the registrant and NXP USA, Inc. (formerly Freescale Semiconductor, Inc.).	10-Q	001-37900	10.1	11/14/2018
10.7.8	Amendment No. 8 to Lease, effective as of November 30, 2019 by and between the registrant and NXP USA, Inc. (formerly Freescale Semiconductor, Inc.).	10-К	001-37900	10.15	3/13/2020
10.7.9	Amendment No. 9 to Lease, effective as of March 31, 2020 by and between the registrant and NXP USA, Inc. (formerly Freescale Semiconductor, Inc.).	10-Q	001-37900	10.2	8/06/2020

10.7.10	Amendment No. 10 to Lease, effective as of February 12, 2022 by and between the registrant and NXP USA, Inc. (formerly Freescale Semiconductor, Inc.)				
10.8	Amended and Restated Loan and Security Agreement, dated as of August 5, 2019, between the registrant and Silicon Valley Bank.	10-Q	001-37900	10.1	11/08/2019
10.8.1	First Amendment to Amended and Restated Loan and Security Agreement, dated as of July 15, 2020, by and between the registrant and Silicon Valley Bank.	10-Q	001-37900	10.3	8/06/2020
10.8.2	Second Amendment to Amended and Restated Loan and Security Agreement, dated as of July 28, 2021, by and between the registrant and Silicon Valley Bank.	10-Q	001-37900	10.5	8/12/2021
10.8.3	Third Amendment to Amended and Restated Loan and Security Agreement, dated as of July 22, 2022, by and between the registrant and Silicon Valley Bank	10-Q	001-37900	10.1	8/12/2022
10.9	Commercial Industrial Lease Agreement, dated as of May 18, 2012 by and between the registrant and Principal Life Insurance Company.	S-1	333-213569	10.17	9/09/2016
10.9.1	Amendment No. 1 to Commercial Industrial Lease Agreement, dated August 12, 2016 by and between the registrant and Legacy Stonelake JV-T, LLC, successor in interest to Principal Life Insurance Company.	S-1	333-213569	10.22	9/09/2016
10.10	Sublease Agreement, dated January 31, 2017 by and between the registrant and NXP USA, Inc. and Consent to of Landlord to Sublease, dated March 10, 2017, by and among the registrant, NXP USA, Inc. and VWP-BV CM 5670, LLC.	8-K	001-37900	10.1	3/28/2017
10.10.1	First Amendment to Sublease Agreement, dated February 13, 2017, by and between the registrant and NXP USA, Inc. and Consent of Landlord to Amendment to Sublease, dated March 10, 2017, by and among the registrant, NXP USA, Inc. and VWP- BV CM 5670, LLC.	8-K	001-37900	10.2	3/28/2017

10.10.2	Second Amendment to Sublease Agreement dated March 2, 2017 by and between the registrant and NXP USA, Inc. and Consent of Landlord to Sublease, dated March 10, 2017, by and among the registrant, NXP USA, Inc. and VWP-BV CM 5670, LLC.	8-K	001-37900	10.3	3/28/2017
10.10.3	Third Amendment to Sublease Agreement, dated October 17, 2017 by and between the registrant and NXP USA, Inc. and Consent of Landlord to Sublease, dated March 10, 2017, by and among the registrant, NXP USA, Inc. and VWP-BV CM 5670, LLC.	10-К	001-37900	10.39	3/15/2018
10.11+	STT-MRAM Joint Development Agreement, dated as of October 17, 2014 by and between the registrant and GLOBALFOUNDRIES Inc.	S-1	333-213569	10.18	9/09/2016
10.11.1+	Amendment No. 1 to the STT-MRAM Joint Development Agreement, dated as of May 27, 2016 by and between the registrant and GLOBALFOUNDRIES Inc.	S-1	333-213569	10.19	9/09/2016
10.11.2++	Amendment No. 2 to the STT-MRAM Joint Development Agreement, effective as of July 25, 2017 by and between the registrant and GLOBALFOUNDRIES Inc.	10-К	001-37900	10.11.2	3/04/2021
10.11.3+	Amendment No. 3 to the STT-MRAM Joint Development Agreement, effective as of January 1, 2018 by and between the registrant and GLOBALFOUNDRIES Inc.	10-К	001-37900	10.27	3/15/2019
10.11.4++	Amendment No. 4 to the STT-MRAM Joint Development Agreement, effective as of December 31, 2019 by and between the registrant and GLOBALFOUNDRIES, Inc.	10-K	001-37900	10.11.4	3/04/2021
10.12+	Manufacturing Agreement, dated as of October 23, 2014 by and between the registrant and GLOBALFOUNDRIES Singapore Pte. Ltd.	S-1	333-213569	10.20	9/09/2016
10.13	Restricted Stock Purchase Agreement, dated as of October 21, 2014 by and between the registrant and GLOBALFOUNDRIES Inc.	S-1	333-213569	10.21	9/09/2016

10.14	Common Stock Purchase Agreement, dated as of September 23, 2016 by and between the registrant and GigaDevice (HK) Limited.	S-1/A	333-213569	10.23	9/26/2016
10.15	Subcontract Agreement, dated as of October 3, 2022, by and between the registrant and QuickLogic Corporation.	10-Q	001-37900	10.2	11/10/2022
10.16†	Non-employee Director Compensation	10-Q	001-37900	10.2	8/07/2019
10.17†	Offer Letter, dated December 30, 2020, by and between the registrant and Darin Billerbeck.	10-K	001-37900	10.26	3/04/2021
10.18†	Executive Employment Agreement, effective as of April 3, 2021, by and between the registrant and Sanjeev Aggarwal	8-K	001-37900	10.1	7/22/2021
10.19†	Executive Employment Agreement, effective as of July 2, 2021, by and between the registrant and Anuj Aggarwal	8-K	001-37900	10.2	7/22/2021
10.20†	First Amendment to Executive Employment Agreement, effective as of March 14, 2022, by and between the registrant and Sanjeev Aggarwal.	8-K	001-37900	10.1	3/02/2022
10.21†	First Amendment to Offer Letter, effective as of March 14, 2022, by and between the registrant and Darin Billerbeck.	8-K	001-37900	10.2	3/02/2022
10.22†	First Amendment to Executive Employment Agreement, effective as of March 14, 2022, by and between the registrant and Anuj Aggarwal.	8-K	001-37900	10.3	3/02/2022
10.23†	Executive Severance and Change in Control Plan.	8-K	001-37900	10.4	3/02/2022
10.24†	Restricted Stock Unit Grants to Executive Chairman, CEO and CFO	8-K	001-37900	Item 5.02	5/12/2022
23.1*	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.				
24.1*	Power of Attorney (included on the Signatures page of this Annual Report on Form 10-K).				

31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended.
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended.
32.1**	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

† Indicates a management contract or compensatory plan.

^{*} Filed herewith.

^{**} Furnished herewith. Exhibit 32.1 is being furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liability of that section, nor shall such exhibit be deemed to be incorporated by reference in any registration statement or other document filed under the Securities Act of 1933, as amended, or the Exchange Act, except as otherwise specifically stated in such filing.

⁺ Confidential treatment has been granted for certain portions of this exhibit.

⁺⁺ Portions of the exhibit, marked by brackets, have been omitted because the omitted information (i) is not material and (ii) would likely cause competitive harm if publicly disclosed.

(b) We have filed, or incorporated into this Annual Report on Form 10-K by reference, the exhibits listed on the Exhibit Index immediately above.

(c) See Item 15(a)2 above.

Item 16. Form 10-K Summary.

Not provided.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized, in Chandler, Arizona, on March 2, 2023.

Everspin Technologies, Inc.

By: /s/ Sanjeev Aggarwal

Sanjeev Aggarwal Chief Executive Officer (Principal Executive Officer)

By: /s/ Anuj Aggarwal

Anuj Aggarwal Chief Financial Officer (Principal Financial and Accounting Officer) KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Sanjeev Aggarwal and Anuj Aggarwal, and each of them, as his true and lawful attorneys-in-fact and agents, each with the full power of substitution, for him and in his name, place or stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ Sanjeev Aggarwal Sanjeev Aggarwal	Chief Executive Officer and Director (Principal Executive Officer)	March 2, 2023
/s/ Anuj Aggarwal Anuj Aggarwal	Chief Financial Officer (Principal Financial and Accounting Officer)	March 2, 2023
/s/ Darin G. Billerbeck Darin G. Billerbeck	Chairman of the Board	March 2, 2023
/s/ Lawrence G. Finch Lawrence G. Finch	Director	March 2, 2023
/s/ Geoff Ribar Geoff Ribar	Director	March 2, 2023
/s/ Tara Long Tara Long	Director	March 2, 2023
/s/ Glen Hawk Glen Hawk	Director	March 2, 2023

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- 1) Registration Statement (Form S-8 No. 333-214018) pertaining to the Everspin Technologies, Inc. 2008 Equity Incentive Plan, 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- 2) Registration Statement (Form S-8 No. 333-219938) pertaining to the Everspin Technologies, Inc. 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- 3) Registration Statement (Form S-8 No. 333-225119) pertaining to the Everspin Technologies, Inc. 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- 4) Registration Statement (Form S-8 No. 333-230349) pertaining to the Everspin Technologies, Inc. 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- 5) Registration Statement (Form S-8 No. 333-237146) pertaining to the Everspin Technologies, Inc. 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- 6) Registration Statement (Form S-3 No. 333-249891) of Everspin Technologies, Inc.,
- 7) Registration Statement (Form S-8 No. 333-253884) pertaining to the Everspin Technologies, Inc. 2016 Equity Incentive Plan and the 2016 Employee Stock Purchase Plan,
- Registration Statement (Form S-8 No. 333-258794) pertaining to the Everspin Technologies, Inc. Amended and Restated 2016 Equity Incentive Plan;
- 9) Registration Statement (Form S-8 No. 333-263404) pertaining to the Everspin Technologies, Inc. Amended and Restated 2016 Equity Incentive Plan and Everspin Technologies, Inc. 2016 Employee Stock Purchase Plan;

of our report dated March 2, 2023, with respect to the financial statements of Everspin Technologies, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Phoenix, Arizona March 2, 2023

Certification of the Principal Executive Officer

I, Sanjeev Aggarwal, certify that:

- 1. I have reviewed this Form 10-K of Everspin Technologies, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e), 15d-15(e)), and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: March 2, 2023

/s/ Sanjeev Aggarwal

Sanjeev Aggarwal Chief Executive Officer (Principal Executive Officer)

Certification of Principal Financial Officer

I, Anuj Aggarwal, certify that:

- 1. I have reviewed this Form 10-K of Everspin Technologies, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e), 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

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

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

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

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

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

Date: March 2, 2023

/s/ Anuj Aggarwal

Anuj Aggarwal (Chief Financial Officer) (Principal Financial Officer)

Certification Pursuant to 18 U.S.C. Section 1350, As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of Everspin Technologies, Inc. (the "Company") on Form 10-K for the year ended December 31, 2022 (the "Report"), Sanjeev Aggarwal, Chief Executive Officer of the Company, and Anuj Aggarwal, Chief Financial Officer of the Company, each hereby certifies, pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. Section 1350), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

- 1. The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 2, 2023

/s/ Sanjeev Aggarwal Sanjeev Aggarwal Chief Executive Officer (Principal Executive Officer)

/s/ Anuj Aggarwal

Anuj Aggarwal Chief Financial Officer (Principal Financial Officer)

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