Risk Factors Comparison 2024-02-12 to 2023-02-13 Form: 10-K

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You should carefully consider the following risk factors, in addition to the other information contained in this report, including the section of this report captioned " Management' s Discussion and Analysis of Financial Condition and Results of Operations " and our financial statements and related notes. If any of the events described in the following risk factors and the risks described elsewhere in this report occur, then our business, operating results and financial condition could be materially impacted. This report also contains forward- looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward- looking statements due to factors that are described below and elsewhere in this report. Risks Relating to Our Platform, Products and Technologies We operate in a very competitive market. Our **primary** ~~principal current~~ competitors are: • ~~In endpoint~~ **Endpoint** ICs ~~,~~ **:** NXP, EM Microelectronic, Kiloway, **Quanray, Shanghai** Fudan Microelectronics Group **, Alibaba** and Alien ~~;~~ **.** • ~~in reader~~ **Reader** ICs **:** ~~, ST,~~ Phychips **Inc** , ~~Iotelligent~~ **Shanghai Fudan Microelectronics Group** and MagicRF **.** ~~; and~~ • ~~in readers~~ **Readers** and gateways ~~,~~ **:** Zebra **. • Test and measurement systems: CISC** . These competitors include companies that have much greater financial, operating, research and development, marketing and other resources than us. To gain market share, they could discount their products and accept lower margins, or they could maintain margins by achieving cost savings through better, more efficient designs or production methods. They could devote more resources than we can to product development, promotion, sale and support. They could also bundle other technologies, including those we do not have in our product portfolio, with their RAIN products. Our partners, including our OEMs, ODMs, distributors, SIs, VARs and solution partners, may choose to compete with us rather than purchase our products, which would not only reduce our customer base but also increase competition in the market. Companies in adjacent markets or newly formed companies may decide to enter our market, particularly as RAIN adoption grows. Further, the Chinese government has made development of the Chinese semiconductor industry a priority, potentially increasing competition for us globally while possibly restricting our ability to participate in the Chinese market. RAIN adoption is concentrated in key ~~industries~~ **markets** and the extent and pace of RAIN market adoption beyond those ~~industries~~ **markets** is uncertain. Our financial performance depends on the pace of end- user RAIN adoption in key ~~industries~~ **markets,** such as retail apparel, our largest market, retail general merchandise and SC & L. Although RAIN has been adopted to some degree by end users in those ~~industries~~ **markets** , those end users as well as the ~~industries~~ **markets** themselves are subject to business cycles **and macroeconomic trends** . Continued RAIN adoption by those end users and in those ~~industries~~ **markets** may be at risk if and when ~~downcycles occur~~ **negative business or economic conditions arise** . **The** ~~Outside those key industries, the~~ RAIN ~~market~~ **opportunity** is still developing. RAIN adoption, as well as adoption of our platform and products, ~~depend~~ **depends** on many factors, including the extent to which end users understand and embrace the benefits that RAIN offers; whether the benefits of RAIN adoption outweigh the cost and time to replace or modify end users' existing systems and processes; and whether RAIN products and applications meet end users' current or anticipated needs. We have, at times, anticipated and forecasted a pace of end- user adoption that exceeded the actual pace **of adoption** . We expect continued difficulty forecasting the pace of adoption. As a result, we may be unable to accurately forecast our future operating results including revenue, gross margins, cash flows and profitability, any or all of which could negatively impact our financial performance. We **must regularly** ~~are expected to~~ introduce new products and product enhancements **to compete effectively** ~~on a regular basis~~ . We introduce new products and services to advance our business, satisfy increasingly demanding end- user requirements and grow RAIN market adoption. We commit significant resources developing and introducing these new products and services. We also commit significant resources improving the performance and reliability of, and reducing the costs of, our existing products and services. Whether our new products and services will succeed is uncertain. Our success ~~in~~ developing the technologies, processes or capabilities necessary or desired for new or enhanced products and services, or licensing or otherwise acquiring them from third parties, and our ability to introduce new products and services before our competition, depends on many factors, including: • our ability to identify new product capabilities or services that **end users** will ~~be~~ widely ~~adopted~~ -- **adopt** ; • our timely and efficient completion of the design process; • our timely and efficient implementation of manufacturing, assembly and testing procedures; • our attainment of appropriate product or service performance levels and product ~~certification~~ **certifications** ; • partnering successfully with others to deliver complementary products or services; • the quality, reliability and selling price of our product or service; and • the effectiveness of our marketing, sales and service. When we introduce new products, our success in ramping adoption depends, in part, on us making those products easy **for** ~~to deploy by~~ our partners and ~~their~~ end users **to deploy and use** . For example, for our new ~~M700~~ **M800** - family endpoint ICs ~~and E- family reader ICs~~ , we ~~continue~~ **are currently significantly** supporting our **inlay** partners to produce high- performing, high- quality ~~products~~ **inlays** . Until our partners are able to deploy our products widely, adoption and our operating results could suffer. Our abilities to deliver ~~platform~~ **enterprise** solutions at scale are nascent. We believe we are still at a very early stage in our ability to deliver enterprise solutions. We are developing solutions for retail self- checkout and loss prevention and SC & L package routing that have been, or that we expect to be, deployed by the industry- leading enterprise end users ~~for whom we are developing the solutions~~ . However, to fully capitalize on our platform' s potential, we must make our current offerings repeatable across multiple enterprises as well as deliver additional solutions to enterprise needs. **We must also develop relationships with top- tier solution partners to gain access to and address challenging new use cases.** If we do not succeed in identifying, developing **, selling** and deploying enterprise solutions **, particularly solutions that rely on autonomous reading, with top- tier partners and** across a range of ~~industries~~ **markets** and ~~customers~~ **end users** , then our business prospects will suffer. Delivering **enterprise** solutions ~~that address enterprise needs~~

requires a network of partner products and services that complement our own product offerings and that together address ~~complex~~ **the** enterprise needs. Convincing enterprises to engage us to solve their business problems – including evaluation, design, deployment, operations and ~~partner~~ services, ~~including leveraging~~ **as well as integrating** RAIN data into the enterprise' s information systems, requires tight coordination among our and our partners' sales, marketing, operations and engineering teams. **We, or our partners, may be unable to successfully acquire customers for our enterprise solutions, or successfully address our market opportunity.** Although we today have partners who **can** successfully introduce our platform, or aspects of it, to their customers, their knowledge of our platform and RAIN in general is still nascent. If we do not build our network of solutions **,** and partners to deliver those solutions **,** and broaden our efforts to deliver solutions that leverage our platform in large, complex enterprise opportunities, then our business prospects will suffer. We rely on endpoint IC sales to generate most of our revenue. We derive, and expect to continue to derive, most of our ~~product~~ revenue from our endpoint ICs. If demand declines, or if we are unable to procure enough wafers to meet the demand we have, or if we are unable to raise prices to offset cost increases, then our business and operating results will suffer. In addition, the continued adoption of, and demand for, our ~~existing~~ endpoint ICs, ~~as well as for our new endpoint ICs,~~ derives in part from **us** ~~our ability to continually innovate and to demonstrate~~ **demonstrating** the benefits of using our **systems** ~~endpoint ICs with our reader ICs, readers and gateways~~ . If we fail to establish ~~the~~ **those** benefits ~~of using our endpoint ICs with our platform,~~ then we may be unsuccessful in countering competitive **endpoint IC price** pressures ~~to lower prices for our endpoint ICs~~ and our business and operating results could be adversely affected. The **average** selling prices of our products could fluctuate substantially. The average selling price, or ASP, of our products has historically decreased with time ~~,~~ **or** to meet end- user demands, ~~to~~ encourage adoption, ~~to~~ address macroeconomic conditions or ~~to~~ respond to ~~market~~ **competitive** pressure **. As demand for older products declines, or as competition** from ~~our competition~~ - **competitors with lower** ~~. However, that trend is not constant and we have also increased prices from time to time. Although we expect further price decreases in the long term, we raised prices in 2021 and 2022 to accommodate higher~~ product costs ~~. We~~ **or lower profitability expectations increases, or during times of oversupply, ASPs** may ~~be required to raise~~ **decline quickly. To compete profitably we must continually improve our technology and processes and reduce unit costs in line with lower selling** prices ~~again if macroeconomic conditions, including inflation, create upward pressure on our product costs~~ . If we are unable to offset ASP reductions with increased sales volumes or reduced product costs, ~~or if we are unable to successfully increase ASPs to offset cost increases,~~ then our revenue and gross margins will suffer. **Though less common** ~~When demand for older products declines~~ , ~~or~~ **we have also increased prices from time to time, especially** during times of **increasing wafer** ~~increased market inventory, ASPs may decline quickly. To sell our products profitably we must continually improve our technology and processes and reduce~~ costs ~~in line with the lower selling~~ **. For example, we raised** prices **in 2021** ~~. If we and our product suppliers and manufacturers cannot create and implement processes or improve efficiencies sufficient to maintain our margins~~ , ~~then we~~ **2022 and 2023 to accommodate higher costs. We** may be ~~unable~~ **required** to ~~sell~~ **raise prices again if macroeconomic conditions, including inflation, create upward pressure on** our ~~products~~ - **product** ~~profitably~~ **costs** . Pricing commitments and other restrictive provisions in our customer agreements could adversely affect our operating results. In the ordinary course of our business, we enter into agreements containing pricing terms that could, in some instances, adversely affect our operating results and gross margins. For example, some contracts specify future IC, reader or gateway pricing or contain most- favored- customer pricing for certain products. Other agreements contain exclusivity terms that prevent us from pursuing certain business with other customers during the exclusivity period. Reducing prices or offering favorable terms to one customer could adversely affect our ability to negotiate favorable terms with other customers. Changes in our product mix could adversely affect our overall gross margin. ~~We generate most of our revenue from endpoint~~ **Endpoint** IC sales **,** which **constitute and likely will continue to constitute the majority of our product revenue,** have, for the most part, lower gross margins than our systems product sales. Our overall product gross margins are affected by product mix, which can fluctuate based on demand and supply, competitive pressures and end- user needs and demand. A shift in sales mix away from our higher margin products to lower margin products, either within our endpoint IC product portfolio or from our systems business to our endpoint ICs, could negatively affect our gross margins. Poor product quality could result in significant costs to us and impair our ability to sell our products. Our products must meet **increasingly** demanding specifications for quality, reliability and performance. Our products are both highly technical and deployed in large, complex systems in which errors, defects or incompatibilities can be problematic for our partners and end users. If we are unable to **identify or** correct errors, defects, incompatibilities or other problems in our products, we could experience: • loss of customer orders or customers; • lost or delayed market acceptance **(either of** ~~or~~ **our products and solutions or RAIN generally); • lost or delayed** sales; • loss of market share; • damage to our brand and reputation; • impaired ability to attract new customers; • diversion of development resources; • increased service and warranty costs; • replacement costs; • legal actions by our partners or end users; and • increased insurance costs. Moreover, if we encounter product quality issues, then we may be required to incur significant time and costs to diagnose, test and fix the issues **. There can be no assurance that such remediation efforts would be successful. Even if successful** , ~~and~~ these efforts could further constrain our ability to supply our partners and end users with new products until we have resolved the issues. End users and partners must design our products into their products and business processes. Persuading end users or partners to design our products into their business processes or products requires educating them about RAIN' s and our products' value. They may use other technologies or products and may not **be receptive** ~~feel the need~~ to **introducing** ~~learn about how~~ RAIN **into** ~~or our products can improve~~ their business processes or products. Even when convinced, they often undertake long pilot programs ~~or~~ **and** ~~qualification~~ **qualifications** ~~processes~~ prior to placing orders. These pilot programs ~~or~~ **and** ~~qualification~~ **qualifications** ~~processes~~ can be time consuming and expensive, and there is no assurance they will result in an order for our products. If we fail to develop new products that adequately or competitively address end users' or our partners' needs, then we may not receive product orders, which could adversely affect our business, prospects and operating results. Our visibility into the length of the sales and deployment cycles for our products is limited. We have limited visibility into end user sales and deployment cycles, and these cycles are often longer than we anticipate. Many factors contribute to our limited visibility, including the time our partners and end users spend evaluating our products, the time educating them on RAIN' s benefits ~~,~~ and the time integrating our products with end users' systems. The length and uncertain timing of the sales and deployment cycles can lead to delayed product orders. In anticipation of those orders, we may incur substantial costs before the sales cycle is complete and before we receive any customer orders or payments, if we receive them at all. An inability or limited ability of end user systems to exploit RAIN information may adversely affect the market for our products. A successful end- user deployment requires not only tags and readers or gateways, but RAIN integration with information systems and applications that create business value from the RAIN data. Unless third parties continue developing and advancing business analytics tools, and end users enhance their information systems to use these tools, RAIN deployments could stall. Our efforts to foster third- party development and deployment of these tools could fail. In addition, our guidance to business- analytics providers for integrating our products with their tools could prove ineffective. Solution providers and SIs are essential to the RAIN market. They provide deployment know- how to enable end users to successfully deploy RAIN solutions. Integrating our products with end- user information systems could prove more difficult or time consuming than we or they anticipate, which could delay deployments. Alternative technologies may enable products and services that compete with ours. Technology developments may affect our business negatively. Breakthroughs in legacy RFID technologies or markets, including those using low frequency or high frequency RFID technology, or in other radio technologies, could adversely affect RAIN market growth and demand for our products. Likewise, new technologies may enable lower- cost ICs than our products. If we are unable to innovate using new or enhanced technologies or are slow to react to changes in existing technologies or in the market, or if we have difficulty competing with advances in new or legacy technologies, then our development of new or enhanced products could be impacted and result in product obsolescence, decreased revenue and reduced market share. Significant changes in RAIN standards bodies, standards or qualification processes could impede our ability to sell our products and services. We ~~participate in developing RAIN industry standards, including with GS1 and ISO, and have designed our products to comply with those standards. We~~ have historically taken a leadership position in **developing RAIN industry** standards ~~development. In~~ **, including with GS1 and ISO, and have designed our products to comply with** ~~the~~ **those** ~~future, we~~ **standards. We** could lose that leadership position ~~or~~ **;** our influence in standards development ~~,~~ **could diminish;** or we could choose not to participate in certain standards activities. New or changed industry standards could ~~cause~~ **affect** us **negatively** ~~to incur substantial development costs to meet the new or changed standards~~ . If industry standards diverge from our or the RAIN market' s needs, then our products may fail to keep pace with the market or cause end users to delay their deployments. Moreover, the adoption or expected adoption of new or changed standards could slow sales of our existing products before we can introduce new products that meet the new or changed standards. New standards or changes to existing standards could also limit our ability to implement new features in our products. The lost opportunities as well as time and expense to develop new products or change our existing products to comply with new or changed standards could be substantial, and we may not ultimately succeed in developing products that comply with **the** new or changed standards. Certain organizations develop requirements for RAIN tags and test tags against those requirements. **For** ~~As one~~ example, the ARC Program at Auburn University ~~, or ARC,~~ develops tag performance and quality requirements for end users that engage them. Some participants in the RAIN market are ARC sponsors, but we are not among them. Some other organizations perform this function as well. ARC or a similar organization could develop specifications that some or all of our endpoint ICs fail to meet **or could delay approval of tags incorporating our endpoint ICs, which could negatively impact market acceptance of our products** . Changes in government spectrum regulations or in their enforcement could adversely affect our ability to sell our products ~~. Government radio regulations require that our readers and gateways be certified for spectral compliance where they are sold or operated~~ . Our readers and gateways are collectively certified for use in more than 40 countries worldwide, including the United States, Canada, Mexico, China, Japan, South Korea and every country in the EU. If ~~one of~~ **spectrum regulations change,** ~~our~~ - **or** ~~reader~~ **if** ~~or~~ **our** ~~gateway~~ products ~~is~~ **are** found to be noncompliant despite being certified, we could **need** ~~be required to modify field- deployed readers or gateways and could spend significant resources and miss sales opportunities in the process. Government regulations may change, possibly without notice, requiring us~~ to redesign our products **, potentially resulting in** ~~to conform with the new regulations or constraining our ability to incorporate new features into our products. Such changes could cause us to incur~~ significant costs, including costs associated with obsolete inventory. Regulatory changes may also cause us **to** forego opportunities ~~to improve our products~~ , ~~potentially delaying~~ **adversely affecting** our **business** ~~time- to- market~~ . Sales of some of our products could cannibalize revenue from other products. Some of our partners develop products ~~using some of our products~~ that compete with ~~other of~~ our products. For example, some of our OEM partners use our reader ICs to build and sell readers and gateways that compete with our readers and gateways. Similarly, some of our partners use our readers to build and sell gateways that compete with our gateways. If we fail to manage such conflicts successfully, then our business and operating results could be negatively affected. Risks Relating to Our Personnel and Business Operations We obtain the products we sell through a limited number of third parties with whom we do not have long- term supply contracts. Our ability to secure cost- effective, quality products in a timely manner could be adversely affected by many factors, including: • Third- party manufacturing capacity may not be available when we need it, particularly from our foundry partners from whom we procure silicon wafers. • Efforts to diversify our supplier base may be unsuccessful or may not result in us obtaining the anticipated benefits of such diversification. • Some products have long lead times, and we place orders for them many months before our anticipated delivery dates to our customers. If we inaccurately forecast customer demand, then we may be unable to meet our customers' delivery requirements or we may accumulate excess inventory, increasing our costs. • Supply disruptions may affect our ability to meet partner or end **-** user demand, whether in a cost- effective manner or at all, potentially causing those partners or end users to cancel orders, qualify alternative suppliers or purchase from our competitors. Supply disruptions can also distort demand, making it even harder to meet true demand with finished products. If our suppliers fail to manufacture our products at reasonable prices or with satisfactory quality levels, then our ability to bring those products to market and our reputation could both suffer. If supplier capacity diminishes, whether from equipment failures, closures, bankruptcy, capacity allocation, in response to **public health events (such as** Covid- 19 **)** , catastrophic loss of facilities or otherwise, then we could have difficulty fulfilling orders, our revenue could decline and our growth prospects could be impaired. Transitioning our product manufacturing to new providers would take many months and, in the case of ICs, could take years. Any transition would require a requalification by our customers or end users, which could also adversely affect our ability to sell our products as well as our operating results. Shortages of silicon wafers and components used in our readers and gateways may adversely affect our ability to meet demand for our products and adversely affect our revenue and / or gross margins. The semiconductor industry has experienced many periods of capacity shortfall and ~~just~~ experienced another ~~due to increased post- Covid demand. In particular,~~ in ~~both~~ 2021 and 2022 ~~we experienced~~ **, causing** tight wafer availability ~~,~~ and **higher prices.** ~~although~~ **Although** ~~our foundry partner has signaled improving~~ wafer availability **improved** in 2023, ~~they have also raised prices. The semiconductor industry may continue to experience significant~~ supply / demand imbalances **can still occur. Additionally** , **we expect** ~~resulting in continued constraints on~~ wafer ~~availability~~ **capacity in the semiconductor nodes we use to be tight for the foreseeable future** . We procure wafers on a purchase- order basis ~~from our foundry partners; consequently~~ , **so our** wafer supply is not ~~contractually~~ guaranteed **,** and **we may** ~~there can be no~~ **not** ~~assurance that we will~~ receive adequate ~~wafer~~ supply from our foundry partners **when shortages occur** ~~in 2023 or in the future~~ . Wafer shortfalls limit sales and may cause market- share losses **. They** ~~if we are unable to supply enough products or our customers purchase competing products or, alternatively,~~ may **also** artificially increase bookings as customers over- order our products, ~~followed by~~ **and then cause** sales declines ~~in future periods~~ as ~~they~~ **those customers** consume their accumulated inventory. Additionally, if **our suppliers charge us more but** we are unable to raise our prices to cover ~~our~~ **those** higher costs, our gross margins and other financial results could suffer. **To guard against** ~~As we recover from~~ wafer shortages, we may invest in inventory to support anticipated business growth, like we did with endpoint IC inventory in 2017 ~~and~~ **,** 2020 **and late 2022 / early 2023. To convert the wafers we receive from our foundry partner into saleable ICs, we perform additional steps including testing, thinning, bumping and dicing. If our third- party suppliers are unable to efficiently perform these steps, or if we experience any capacity constraints with respect to these steps, then we may be unable to satisfy demand for our products, adversely affecting our financial results. We may be unable to accurately anticipate the scope or nature of business demand, which could cause excess or obsolescent inventory. We maintain inventory to meet customer demand, but high inventory levels can increase expenses or reserves and expose us to a higher risk of product obsolescence when we introduce new products and technologies, all of which could negatively affect our business. For example, in 2022 we had strong demand for our M700 ICs, but due to limited 300mm wafer supply, we transitioned some customers back to our prior- generation 200mm Monza R6 product family** . If we are unable to sell the inventory we purchased, or if we must sell it at lower prices ~~due to excess inventory or obsolescence~~ , then our business will be negatively impacted. ~~To convert the wafers we receive from our foundry partner into saleable products, we and several third parties perform additional procedures, such as testing, thinning, dicing and bumping the ICs. If we or our partners are unable to efficiently perform these post- processing procedures, or if we experience any capacity constraints with respect to these post- processing procedures, then we may be unable to keep up with demand for our products and our financial results will suffer.~~ We have also experienced shortages and price increases for components we use in our readers and gateways, as well as in packaging and test capacity for our reader ICs, and we may continue to experience such shortages and price increases in the future. Any such shortages or price increases will negatively impact our product availability and costs ~~. If we are unable to procure sufficient components~~ and ~~to increase our prices to cover our increased costs, then~~ our financial results will suffer. We bear inventory risks due to our reliance on partners to sell and distribute our products. We typically order products from our suppliers based on partner forecasts before we receive purchase orders. However, many of our partners have difficulty accurately forecasting their demand and the timing of that demand. They also sometimes cancel orders or reschedule product shipments, in some cases with little or no advance notice to us. We also sometimes receive soft commitments for large orders which do not materialize. In addition, when we introduce new products, we may initially carry higher inventory or have slower inventory turns depending on market acceptance. We have additional uncertainty arising from competition and from unanticipated external events, such as **macroeconomic trends or events and** changes in regulatory standards, all of which can adversely affect demand and consequently our inventory levels, sales and operating results. **Acquisitions could result in operating difficulties, dilution and other harmful consequences. We regularly evaluate potential strategic transactions, and we may pursue them if complementary to our business. For example, in April 2023 we completed our acquisition of Voyantic Oy, a global provider of RFID (primarily RAIN and NFC) inlay and label design, manufacturing and test systems. Strategic transactions could be material to our financial condition and operating results. We have limited experience executing acquisitions. Integrating an acquired company, business or technology may create unforeseen operating difficulties and expenditures. Acquisition- related risks include: • difficulties integrating acquired products or lines of business into our strategy and product plans; • customers switching from us to new suppliers because of the acquisition; • inability to retain employees from the business we acquire; • challenges associated with integrating employees from the acquired company into our organization; • difficulties integrating accounting, management information, human resource, legal and other administrative systems to permit effective management of the business we acquire; • potential requirements for remediating controls, procedures and policies appropriate for a public company in the acquired business that, prior to the acquisition, lacked these controls, procedures and policies; • potential liability for past or present environmental, hazardous substance or contamination concerns associated with the acquired business or its predecessors; • possible write- offs or impairment charges resulting from the acquisition; and • unanticipated or unknown liabilities relating to the acquired business. Foreign acquisitions involve additional risks beyond those above, including related to integrating operations across different cultures and**

languages, currency risks and the economic, political and regulatory risks associated with other countries. Also, the anticipated benefit of any acquisition, domestic or foreign, may not materialize. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, debt incurrence, contingent liabilities or amortization expenses or goodwill write- offs, any of which could harm our financial condition. Future acquisitions may require us to obtain additional equity or debt financing, which may not be available on favorable terms or at all. Our business has been and may continue to be adversely affected by public health outbreaks and pandemics. Starting in 2020, Covid- 19 ~~has adversely affected our business, and the magnitude and duration of future Covid- 19 effects on our business are uncertain. Since 2020, Covid- 19 has~~ created significant worldwide economic volatility, uncertainty and disruption, and **presented our business with several** ~~those effects may persist. Our significant continuing Covid- 19~~ risks **and challenges,** ~~include~~ **included** : • uncertain product demand globally; • product availability delays and shortages; • challenges in effectively managing our inventory ~~due to uncertain supply or demand~~ ; • partner- requested preordering or rescheduling ~~as a result of supply concerns~~ , ~~possibly~~ distorting channel inventory ~~, either positively or negatively~~ ; • increased operating and product costs; • delays in research and development ~~efforts~~ , which, in turn, ~~could delay~~ **delayed** new product introductions ~~or~~ **and** product enhancements; and • maintaining employee engagement and productivity ~~in a remote or hybrid work environment~~ . **Although the** ~~The extent to which~~ Covid- 19 **global health emergency officially ended in** ~~will continue impacting market demand is unclear. In 2020~~ **2023** ~~and 2021~~ , **experts caution that** Covid- 19 ~~adversely affected retail~~ **remains a public health risk, and other future public health outbreaks or pandemics could pose similar challenges and risks to our business. The extent to which any public health outbreak or pandemic** , including ~~retail apparel, where RAIN is widely adopted. It also affected other markets that use our products including aviation, sporting events such as footraces, and others. Our international supply chains remain vulnerable to~~ Covid- 19 ~~related disruptions because most our products are manufactured and processed in Asia~~ , **could impact future market demand** ~~which until fairly recently imposed regional lockdowns~~ and ~~which~~ **our business results** is **uncertain** ~~still experiencing significant negative impacts of Covid- 19. Accordingly, risks associated with Covid- 19 on our future product supply remain~~ . Changes in global trade policies could have a material adverse effect on us. Changes in U. S. and foreign laws and policies governing foreign trade, manufacturing, development and investment in the jurisdictions where we currently develop and sell products, and any negative consequences resulting from such changes, could materially affect our business. The U. S. government has imposed significant tariffs on a variety of items imported from other countries, particularly China. China responded by imposing significant tariffs on a variety of items imported from the United States. These tariffs could materially and adversely affect our ability to compete internationally. Although the United States and China signed a preliminary trade agreement in early 2020, the tariffs remain in place as negotiations between the countries continue. The future of these tariffs, as well as the possibility for new tariffs, remains uncertain. Changes in U. S. and Chinese industrial policy also contribute to uncertainty regarding the global trade environment. Other causes of uncertainty include the effects of sanctions and other actions ~~taken~~ against Russia ~~because~~ **after** Russia invaded Ukraine. While we do not today have business with Russian partners or end users, the effect of these sanctions on global trade and macroeconomic conditions generally — such as **increasing** ~~increases in the cost of~~ energy **costs** and inflation — could nevertheless negatively affect our business. We are subject to risks inherent in operating abroad and may not be able to successfully maintain or expand our international operations. In ~~2022~~ **2023** , we derived ~~83~~ **72** % of our total revenue from sales outside the United States. We anticipate growing our business, in part, by growing our international operations, which presents a variety of risks, including: • changes, some unexpected or unanticipated, in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties or other trade restrictions; • lack of established, clear ~~,~~ or fairly implemented standards or regulations with which our products must comply; • greater difficulty in enforcing contracts, judgments and arbitration awards in international courts, and in collecting accounts receivable as well as longer payment and collection periods; • limited or unfavorable intellectual property protection; • misappropriation of our intellectual property; • inflation and fluctuations in foreign currency exchange ~~rates~~ and interest rates; • restrictions, or changes thereof, on foreign trade or investment, including currency- exchange controls, including as a result of sanctions against Russia ~~as a result of Russia invading Ukraine~~ ; • changes in a country' s or region' s political, regulatory, legal or economic conditions, including, for example, global and regional economic disruptions caused by **any future public health outbreaks or pandemics, including a resurgence of** Covid- 19; • political, social and economic instability abroad; wars and other armed conflicts **, such as those in Ukraine and the Gaza Strip; geopolitical tensions, such as those between the United States, China and Taiwan** ; and terrorist attacks and security concerns in general ~~, including Russia invading Ukraine and China threatening Taiwan~~ ; • differing regulations with regard to maintaining operations, products and public information; • inequities or difficulties obtaining or maintaining export and import licenses; • differing labor regulations, including where labor laws may be more advantageous to employees than in the United States; • restrictions on earnings repatriation; • corrupt or unethical practices in foreign jurisdictions that may subject us to exposure under applicable anti- corruption and anti- bribery laws such as the U. S. Foreign Corrupt Practices Act of 1977, as amended, or FCPA, and the United Kingdom Bribery Act of 2010, or U. K. Bribery Act; and • regulations, and changes thereof, relating to data privacy, cybersecurity and the unauthorized use of, or access to, commercial and personal information, particularly in Europe. We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets. We must export and import our products in compliance with U. S. export controls, including the Commerce Department' s Export Administration Regulations and economic and trade sanctions established by the Treasury Department' s Office of Foreign Assets Controls, as well as similar controls established in the countries in which we do business. For example, the U. S. Commerce Department recently ~~issued~~ **strengthened** rules regarding semiconductor- and supercomputer- related products and restrictions against sending certain chips and chip- related technology and software to China without an export license. **The modifications included an expansion of the products and destinations that require licensing.** In addition, **the United States and other countries continue to expand the economic sanctions and export control restrictions imposed against Russia and Belarus and**

certain Russian nationals and entities after Russia invaded Ukraine ~~, the United States and other countries imposed economic sanctions and export control restrictions against Russia and Belarus, as well as against certain Russian nationals and entities~~ . We must undertake additional diligence efforts to comply with these rules, which may be time- consuming and result in delayed or lost opportunities. We may not always be successful in obtaining necessary export or import licenses, and our failure to obtain required export or import approval for our products or limitations on our ability to export or sell our products may harm our domestic and international sales and negatively affect our revenue. ~~The U. S. government has imposed tariffs~~ **Tariffs** ~~on a variety of items imported from China. China has responded by imposing tariffs on a variety of items imported from the United States. Such tariffs~~ could **also** have a material impact on our product costs and decrease our ability to sell our products to existing or potential customers as well as harm our ability to compete internationally. **For more information, see " Changes in global trade policies could have a material adverse effect on us. "** Any changes in our product or in export or import regulations or legislation; ~~shift~~ **shifts** or ~~change~~ **changes** in enforcement; or ~~change~~ **changes** in the countries, persons or technologies targeted by these regulations could delay us introducing new products in international markets, decrease use of our products by, or decrease our ability to export or sell our products to, existing or potential customers with international operations, adversely affecting our business and results of operations. Instability or deterioration in the political, social, business or economic conditions in key ~~production~~ jurisdictions could harm our supply **or development** of products. Deterioration in the political, social, business or economic conditions in any jurisdictions in which we have significant suppliers **, distributors or end users — including as a result of natural disasters, labor strikes, public health crises, geopolitical events or other developments —** could slow or halt product shipments or disrupt our ability to manufacture, test or post- process our products **., as well as our ability to effectively and timely execute on end user deployments** . We outsource our manufacturing and production to suppliers in a small number of Asian jurisdictions including Thailand, Malaysia, Taiwan and China. Some of these jurisdictions have experienced, and may ~~continue~~ **yet** ~~experiencing~~ **experience** , ~~intermittent or sustained mandatory shutdowns or other~~ restrictions **related** to ~~combat the spread of~~ Covid- 19. These jurisdictions have also experienced significant changes in political, social, business or economic conditions in the past and may experience them in the future. We could be forced to transfer our manufacturing, testing and post- processing activities to more stable, and potentially more costly, regions or find alternative suppliers. We source a significant portion of our wafers from suppliers in Taiwan, and our supply of wafers and other critical components may be materially and adversely affected by diplomatic, geopolitical and other developments between China and Taiwan. Notably, China has refused to renounce the use of military force against Taiwan, and there can be no assurance that relations between China and Taiwan will not deteriorate further, particularly in light of ongoing tensions between the United States and China. Any such developments could materially and adversely affect our business, financial condition and results of operations. Our business operations could be disrupted by natural disasters. In addition to the pandemic risk discussed earlier under " — ~~Covid~~ **Our business has been and may continue to be adversely affected by future public health outbreaks and pandemics, including a potential resurgence in COVID** - 19 **cases** ~~has adversely affected our business, and the magnitude and duration of future Covid- 19 effects on our business are uncertain~~ , " other disasters, whether natural or manmade, could decrease demand for our products, disable our facilities, disrupt operations or cause catastrophic losses. We have facilities in areas with known seismic activity, such as our headquarters in Seattle, Washington. We have facilities in areas with known flooding, such as our office in Shanghai, China. We have a wafer ~~testing and dicing~~ **post- processing** subcontractor in Thailand, a region with a known, and recent, history of flooding. A loss at any of these or other of our or our suppliers' facilities could disrupt operations, delay production and shipments, reduce revenue and engender potentially large expenses ~~to repair or replace the facility~~ . We do not carry insurance covering potential losses caused by pandemics, earthquakes, floods or other disasters. Risks Relating to Our Relationships with Partners and End Users We rely on a small number of customers for a large share of our revenue. We sell our endpoint ICs directly to inlay and tag OEMs and ODMs. We sell our reader ICs to OEMs and ODMs ~~,~~ and our readers and gateways to solution providers, VARs and SIs, all primarily through distribution. If we fail to retain our endpoint IC, reader IC, reader or gateway partners or distributors or fail to establish relationships with new partners, then our business, financial condition or operating results could be harmed. In ~~2022~~ **2023** , sales to tag OEMs Avery Dennison and Arizon accounted for ~~28~~ **33** % and ~~10~~ **11** % of our total revenue, respectively. Sales concentration to a small number of OEMs decreases our bargaining power and increases the risk that our pricing or sales could decline based on actions taken by our competitors or our own failure to compete effectively. Our competitors' relationships with, or acquisitions of, these partners or distributors could interfere with our relationships with them. Any such interference could impair or delay our product sales or increase our cost of sales. We engage directly **some** with end users ~~to adopt our products in large projects~~ . ~~These~~ **Their** projects, often involving large purchases of our readers and gateways, are often discrete deployments that can result in significant sales for periods of time. They also increase the volatility of our revenue and operating results. If we are unable to replace project-based revenue with new revenue streams, or if end users with large projects change or delay ~~them~~ **those projects** without giving us with adequate notice, then our sales could decline from period to period and harm our stock price. Our ability to affect or determine end- user demand is limited in part because we sell and fulfill primarily through partners and rarely directly to end users. End users drive demand for our products but because we sell our products primarily through partners, we are one step removed from those end users and often unable to directly assess and affect their demand. Our partners may choose to prioritize selling our competitors' products over ours, or they may offer products that compete with our products or limit sales of our products. If our partners do not sell enough of our products or if they choose to decrease their inventories of our products, then our sales to those partners and our revenue will decline. Our partners may not properly forecast end users' demand for our products. Our partners may purchase more of our products than they need to satisfy end- user demand, increasing their inventory and reducing our future sales to them. Distributors may, subject to time and quality limitations, return products in exchange for other products. Our reserves estimates for products stocked by our distributors are based primarily on reports provided to us by those distributors, typically monthly. If the inventory and resale information our partners and distributors provide is inaccurate, or if we do not receive it in a timely manner, then we may not have a reliable view of products being sold to end users which could negatively impact our operating results. Our growth strategy depends in part on the success of strategic relationships with third parties and their continued performance and alignment. We invest in relationships with solution providers, SIs, VARs and software providers whose product and / or solution offerings complement ours and through which we often fulfill our product sales. Our business will be harmed if we fail to develop and grow these partner relationships. For example, our operating results may suffer if our efforts developing partner relationships increase our costs but do not increase revenue. Partner relationships may also include exclusivity provisions, multiple levels of distribution, discounted pricing or investments in other companies. The cost of developing and maintaining these partner relationships may go unrecovered and our efforts may not generate a corresponding revenue increase. **Occasionally we also engage directly with end- users, often at their request, to help them develop solutions for challenging use cases. Such direct engagements could cause, or could be perceived to cause, conflicts with partners that could harm our partner relationships and our business, results of operations or financial condition.** If we fail to maintain or enhance our brand recognition or reputation on which our business depends, then our business could be harmed. We believe that building our brand and reputation is key to our relationships with partners and end users and our ability to attract new partners and end users. We also believe that our brand and reputation will be increasingly important as market competition increases. Our success depends on a range of factors, including: • continuing to deliver high- quality, innovative and defect- free products; • maintaining high partner and end **-** user satisfaction; • successfully differentiating our products from those of our competitors; and • ~~appropriately~~ managing both positive and negative publicity. Product supply shortages have challenged our ability to meet market needs and we have ~~recently~~ increased prices in response to our suppliers increasing their prices to us. Our inability to supply partners and end users with products they need, and / or our need to increase our prices could result in long- lasting, negative consequences to our relationships with those partners and end users, to RAIN adoption and to our business overall. Increasing attention to environmental, social and governance matters may cause us to incur additional costs or expose us to additional risks. Investors, governmental and nongovernmental organizations, partners and end users are increasingly focusing on environmental, social and governance, or ESG, practices. Our ESG practices may not meet their standards, and they as well as advocacy groups may campaign for us to change our business or practices to address their ESG- related concerns. ~~A~~ **Our** failure, or perceived failure, ~~of us~~ to respond to any such campaigns could harm our business and reputation and negatively impact the market price of our securities. Moreover, with the continued evolution of ESG practices and reporting and disclosure requirements, our costs related to those ESG practices and reporting and disclosure requirements could increase, which could negatively affect our operating results. Risks Relating to Our Intellectual Property If we are unable to protect our intellectual property ~~,~~ then our business could be adversely affected. Our success depends in part upon our ability to obtain, maintain and enforce our patents, copyrights, trade secrets, trademarks and other intellectual property rights and prevent third parties from infringing, misappropriating or circumventing those rights. We have historically focused on filing U. S. patent applications, for many reasons, including the fact that ~~most~~ **a significant portion of** RAIN products are used in or imported into the United States. We have only a small number of foreign ~~patent~~ **patents and** applications ~~or foreign patents~~ . We also only have registered trademarks and domain names in select countries where we believe filing for such protection is appropriate. By focusing our intellectual property protection on the United States and a small number of foreign countries, we have **a** limited ability to assert that intellectual property outside the United States, including in some significant foreign markets such as China. **Moreover, the global manufacturing and distribution systems for tags or labels incorporating our endpoint IC products could complicate our efforts to enforce our U. S. patents.** We cannot guarantee that: • any of the patents, trademarks, copyrights, trade secrets or other intellectual property rights we presently employ in our business will not lapse or be invalidated, circumvented, challenged or abandoned; • our intellectual property rights will provide competitive advantages to us; • our ability to assert our intellectual property rights against potential competitors or to settle current or future disputes will not be limited by our agreements with third parties; • any of our pending or future patent applications will ~~be issued~~ - **issue** or have the coverage we originally sought; • our intellectual property rights can or will be enforced, particularly in jurisdictions where competition may be intense or where legal protections may be weak; • we will not lose the ability to assert our intellectual property rights against, or to license our technology to, others and collect royalties or other payments; or • we will retain the right to ask for a royalty- bearing license to an industry standard if we fail to file an intellectual property declaration pursuant to the standards process. Monitoring and addressing unauthorized use of our intellectual property is difficult and costly, and litigation to enforce our intellectual property rights is time consuming, distracting, expensive and uncertain. Our failure to identify unauthorized use of, or otherwise adequately protect our intellectual property could adversely affect our business. We **are and** may ~~become~~ **continue to be** party to intellectual property disputes which could be time consuming ~~,~~ **and** costly to prosecute, defend or settle, result in the loss of significant rights, and adversely affect RAIN adoption or adoption of our products or platform. We are engaged in several patent infringement lawsuits against **certain affiliates of** NXP **Semiconductors N** ~~USA, Inc~~ . **V** ~~, a Delaware corporation, and certain of its affiliates~~ . For further information regarding this litigation, please refer to Note ~~11~~ **12** of our consolidated financial statements included elsewhere in this report. Our litigation with NXP ~~will~~ **, including any appeals, has contributed, and may continue to contribute, to** ~~increase~~ **increased** ~~our~~ **legal** expenses, ~~distract~~ **and demands on our** management ~~and key employees~~ **team' s time,** and could negatively impact our relationships with partners or end users. **While we have obtained favorable jury verdicts in prosecuting our patent infringement claims against NXP in California and Texas and in defending against NXP' s patent infringement claims against us in Washington and Texas, post- trial rulings have limited some of the verdicts and all such verdicts remain subject to appeal. Moreover, these verdicts provide no assurance regarding the results of our other ongoing litigation involving NXP.** If we are unsuccessful in prosecuting our patent ~~-~~ infringement claims against NXP or in defending ourselves against NXP' s counterclaims, or to the extent we cannot maintain the validity and enforceability of our patents, then we could see a material adverse effect on our business, results of operations or financial condition. **Patent litigation is complex and uncertain.**

We may or may not prevail in patent- related proceedings ~~given the complexity~~ and ~~inherent uncertainties in patent litigation~~ **our intellectual property could be weakened** . If any pending or future proceedings result in an adverse outcome ~~,~~ then we could be required to: • cease manufacturing, using or selling the infringing products, processes or technology; • pay substantial damages for infringement; • expend significant resources to develop noninfringing products, processes or technology; • license technology from the 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 partners or end users for them to discontinue using, or replace, infringing products with **non-** ~~noninfringing~~ --- **infringing** products **. Even if we do prevail in patent- related proceedings, verdicts and judgments can be modified or even reversed by trial or appellate courts** . Many companies in our industry, as well as nonpracticing entities, hold patents and other intellectual property rights and may pursue, protect and enforce those intellectual property rights. We receive invitations to license patent and other intellectual property rights to technologies that could be important to our business. We also receive assertions against us, our partners and end users claiming we or they infringe patent or other intellectual property rights. If we decline to accept an invitation to license or to refute an asserted claim, then the offering or claiming party may pursue litigation against us. Intellectual property disputes have adversely affected RAIN adoption in the past. As one example, in 2011 **,** Round Rock Research filed lawsuits against 11 end users, including Walmart and Macy' s, for RAIN- related patent infringement. Despite the subsequent availability of an industry- wide license, we believe those lawsuits adversely affected demand for our products from 2011 to 2019. The **last of the** licensed Round Rock patents expired in 2019. However, we, our partners, suppliers or end users could be involved in similar disputes in the future which could adversely affect our operating results and growth prospects. Many of our agreements require us to indemnify and defend partners and end users from third- party infringement claims and pay damages in the case of adverse rulings. These damages could be sizable and disproportionate to the business we derive from those partners or end users. Moreover, we may not know whether we are infringing a third party' s rights due to the large number of RAIN- related patents or to other systemic factors. For example, patent applications in the United States are maintained in confidence for up to 18 months after filing or, in some instances, for the entire time prior to patent issuance. Consequently, we may not be able to account for such rights until after a patent issues. Intellectual property policies of industry standards organizations in whose working groups we participate could require us to provide royalty- free licenses of some of our intellectual property. When participating in GS1, ISO, RAIN and other industry- standards organizations, it is a general policy that those who participate in developing a protocol or standard must license, either royalty- free or under reasonable and nondiscriminatory, or RAND, terms, intellectual property that is necessary to implement all or part of the protocol or standard. The standards body may require that the license be granted to members, as in the case of GS1, or to all parties, as in the case of ISO, that implement the protocol or standard. As a participant in developing GS1 EPCglobal UHF Gen2, UHF Gen2 V2, tag data standards, low- level reader protocol and other GS1 EPCglobal protocols, we agreed to license to other GS1 EPCglobal members, on a royalty- free basis, those of our patents necessary to practice those protocols, subject to us receiving reciprocal royalty- free rights from the other GS1 EPCglobal member practicing the protocol. As a participant in developing ISO standards, we agreed to license on a RAND basis those of our patents necessary to practice those standards, subject to us receiving a reciprocal RAND license from the other entity practicing the standard. Although the policies themselves seek to advance protocol or standards development, disputes can arise because it may not be clear whether certain intellectual property is necessary to practice a protocol or standard. Such uncertainty could complicate us asserting our not- necessary patents against others, or to use those patents in our own defense, thereby devaluing our intellectual property. Further, some GS1 EPCglobal members declined to license their intellectual property on royalty- free terms, instead retaining the right to license their technology on RAND terms. These members may choose to assert their intellectual property, in which case we will need to defend ourselves within the confines of the GS1 and ISO intellectual property policies. We rely on third- party license agreements which, if impaired or terminated, could cause production or shipment delays that could harm our business. We have license agreements with third parties for patents, software and technology we use in our operations and in our products. For example, we license tools from design- automation software vendors to design our silicon ICs. Third- party licenses for patents, software and other technology important to our business may not continue to be available on commercially reasonable terms or may not be available at all. Loss of any such licenses could cause manufacturing interruptions or delays or reductions in product shipments until we can develop, license, integrate and deploy alternative technologies, if even possible, which could harm our business and operating results. Our use of open- source software may expose us to additional risks and weaken our intellectual property rights. Our products, processes and technology sometimes use or incorporate software that is subject to an open- source license. Certain open- source licenses require a user who intends to distribute the open- source software as a component of the user' s software to disclose publicly part or all of the user' s source code. In addition, certain open- source software licenses require the user of such software to make derivative works of the open- source software available to others at low or no cost. ~~In addition, open~~ **Open** - source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of their code, opening us to business risks that could materially harm our operating results. We cannot guarantee that we have incorporated open- source software in a manner that is consistent with our policies and procedures relative to such open- source software, or in a manner that will not subject us to liability. Risks Relating to Privacy and Cybersecurity Privacy and security concerns relating to RAIN could damage our reputation and deter current or potential customers from using our products. Privacy advocates and others have raised and may continue raising concerns about RAIN compromising consumer privacy or facilitating theft. These concerns include unauthorized parties potentially collecting personal information or personal data, tracking consumers, stealing identities or causing other issues relating to privacy or data protection. Any such incident could cause our or our partners' or end users' operations to be disrupted and subject us or them to regulatory investigations or proceedings and claims, demands or litigation; consequently, we could face potential liability and significant costs and expenses to remediate or otherwise respond to the incident. Any failure or perceived failure to comply with any privacy- or security- related laws, regulations or contractual or other obligations to which we are or may be subject may result in regulatory actions, claims or litigation; legal and other costs; substantial time and resources; and fines, penalties or other liabilities. Any actions or concerns about security and privacy may be expensive to defend, cause us to expend substantial time and resources and damage our reputation and operating results or ~~could~~ negatively impact overall RAIN industry development, even if unfounded. We cannot be sure that any limitation- of- liability provisions in our ~~customer and user~~ agreements **with customers** , contracts with third- party vendors and service providers or other contracts are enforceable or adequate or ~~would~~ **will** protect us from any liabilities or damages against claims relating to a security breach or other privacy- or security- related issue. Government regulations and guidelines and other standards relating to consumer privacy **and cybersecurity** may adversely impact adoption of our products, require us to make design changes or constrain our ability to implement new and desired product features, and actual or alleged violations of laws relating to privacy or ~~information~~ **cyber** security may result in claims, proceedings and liability. Our partners and end users are subject to laws and regulations related to collecting, storing, transmitting and using personal information and personal data, as well as to additional laws and regulations that address privacy and ~~security~~ **cybersecurity** related to RFID in general. Because RAIN is a type of RFID, we believe these laws and regulations apply to RAIN. The European Commission, or the EC, has issued guidance to address privacy concerns about RFID. In May ~~,~~ 2009 **,** the EC issued a recommendation that retailers in the EU inform their customers when RFID tags are either on or embedded within products. In April 2011 the EC signed a voluntary agreement with private and public entities to develop privacy guidelines for companies using RFID in the EU. Whereas compliance is voluntary, our partners and end users that do business in the EU prefer products that comply with the guidelines. If our products do not comply or enable compliance with the guidelines, then our business may suffer. More generally, the data security and privacy legislative and regulatory landscape in the United States, EU and other jurisdictions continues evolving. Aspects of key privacy laws and regulations — including the California Consumer Privacy Act of 2018, the California Privacy Rights Act ~~and~~ **, similar privacy laws enacted in** ~~the~~ **other states and the EU** General Data Protection Regulation — remain unclear as of the date of this report and continue evolving, potentially with far- reaching implications. Laws and regulations relating to privacy, data protection and security; related industry standards and guidelines; and continued evolution of these laws, regulations, standards, guidelines and other actual and asserted obligations, as well as their interpretation and enforcement, may require us to modify our products, practices and policies, which we may not be able to do on commercially reasonable terms or at all, and otherwise could cause us to incur substantial costs and expenses. Any failure or perceived failure by us or any third parties with which we do business to comply with these laws and regulations or other actual or asserted obligations may result in claims or litigation; actions against us by governmental entities; legal and other costs; substantial time and resources and fines, penalties or other liabilities. Any such actions may be expensive to defend, may incur substantial legal and other costs and substantial time and resources and likely would damage our reputation and adversely affect our business, financial condition and results of operations. Additionally, if we fail to develop products that meet end- user privacy requirements, then end users may choose not to use our products. Although the Gen2 V2 protocol includes features for addressing consumer privacy and authenticating a tag, and although we have incorporated custom features in our products to further protect consumer privacy, a third party may still breach these features, including as implemented in our products, in which case our reputation could be damaged and our business and prospects could suffer. A breach of security or other security incident impacting our systems or others used in our business could have an adverse effect on our business. We face risks of security breaches and incidents from a variety of sources including viruses, ransomware, hacking, malicious code, supply- chain attacks as well as social engineering or other employee or contractor negligence, malfeasance or unintentional acts. Accidental or willful security breaches or incidents, or unauthorized access to our facilities or information systems, or to others used in our business, could compromise the security of those facilities or information systems and the confidentiality, integrity and availability of confidential, personal or proprietary information. **These risks may be heightened in connection with geopolitical tensions and events.** The consequences of loss **, unavailability** , misuse, corruption or other unauthorized processing of confidential, personal or proprietary information could include, among other things, unfavorable publicity, reputational damage, difficulty marketing or selling our products, customer allegations of breach of contract, loss or theft of intellectual property, claims and litigation, governmental and regulatory investigations and other proceedings and fines, penalties and other damages and liabilities. Any of these consequences could have a material adverse effect on our business, financial condition, reputation and business relationships. We rely on third- party services to store and process data on our behalf, and on third- party security systems in a variety of applications. Our platform operates in conjunction with, and depends on, third- party products, services and components for security. The cybersecurity threat environment continues **evolving, especially with** ~~to evolve considering the increase in remote work and~~ heightened activity by state- sponsored actors. If we, our platform, or any of the third parties on which we rely suffers **or is believed to have suffered** a security breach or incident, vulnerability, error, ransomware or malicious event, then we could face increased costs, claims, liability, reduced revenue and harm to our reputation. We **devote resources** ~~incur significant costs~~ to detect and prevent security breaches and other security- related incidents. In the event of an actual or perceived security breach or incident we may need to expend significant resources to mitigate, notify third parties of, and otherwise address the breach or incident, its root cause and take steps to prevent further breaches or incidents. Our insurance may not adequately cover claims relating to an actual or perceived security breach or incident and any breach or incident may increase our insurance costs as well as reduce or eliminate the future availability of such insurance, harming our business and reputation. Risks Relating to Our Financial Position and Capital Needs We have a history of losses and have only achieved profitability intermittently. We cannot be certain that we will attain or sustain profitability in the future. We have incurred losses since our inception in 2000. Whereas we were profitable between 2013 and 2015, we had a net loss of $ ~~24~~ **43** . ~~3~~ **4** million for the year ended December 31, ~~2022~~ **2023** , and an accumulated deficit of $ ~~386~~ **430** . ~~8~~ **2** million as of December 31, ~~2022~~ **2023** . Our ability to attain or sustain profitability depends on numerous factors, many of which are out of our control, including continued RAIN industry adoption and us maintaining or growing our market share. Our costs to support operations, product development and business and personnel expansion in sales, engineering and marketing are significant and are likely to increase as we invest to grow the market and our share of it, reduce our costs and improve our operations. If we fail to increase our revenue or manage our expenses, or if our investments in growing the market or our share of it fail, then we may not attain or sustain profitability. We have a history of significant fluctuations in our quarterly and annual operating results. Our history shows significant sales volatility and a limited ability to forecast sales. We anticipate that, for the foreseeable future, our visibility to future sales, including volumes and prices, will continue to be limited. That limited visibility may cause fluctuations in our operating results and differences between actual and expected quarterly or annual operating results. Many factors, some outside our control, may cause or contribute to fluctuations in our quarterly and annual operating results. These fluctuations make financial planning and forecasting difficult. These fluctuations may also cause unanticipated decreases in our available cash, which could negatively affect our business and prospects. Material factors that contribute to fluctuations in our operating results include: • macroeconomic conditions, including inflation ~~and~~ **,** recession **or economic slowdown** , and their impact on our business and that of our suppliers, partners and end users; • fluctuations or delays in RAIN adoption and deployment by end users **; • changes in the pace or direction of major deployments, whether due to macroeconomic conditions or enterprise-specific events or circumstances, and our, or our partners', ability to win business from these deployments** ; • fluctuations in demand for our products or platform, including by tag OEMs and other significant partners and end users on whom we rely for a substantial portion of our revenue; • fluctuations in the pricing and availability or supply of our products or key elements or components of those products, especially semiconductor wafers; • degradations in product quality, whether due to us or our suppliers, including quality claims or product returns; • delays in new- product introductions and in the maturity of our new-product technologies; • decreases in selling prices for our products; • delays in our product- shipment timing, customer or end-user sales or deployment cycles, or work performed under development contracts; • intellectual property disputes involving us, our partners, end users or other participants in our industry; • adverse outcomes of litigation or governmental proceedings; • timing variability in product introductions, enhancements, services and technologies by us and our competitors as well as market acceptance of new or enhanced products, services and technologies; • unanticipated excess or obsolete inventory as a result of **significant demand fluctuations,** supply- chain mismanagement, new- product introduction, quality issues or otherwise; • changes in the amount and timing of our operating costs, including those related to expanding our business, operations and infrastructure; • changes in business cycles or seasonal fluctuations that affect the markets in which we sell; • changes in industry standards or specifications, or changes in government regulations, relating to our products or our platform; • late, delayed or cancelled payments from our partners or end users; and • unanticipated impairment of long- lived assets and goodwill. A substantial portion of our operating expenses are fixed in the short term, and as a result, fluctuations in revenue or unanticipated expenses can have a material and immediate impact on our profitability and negatively affect our operating results, which could cause the price of our common stock to decline. We may need to raise additional capital **,** which may not be available on favorable terms or at all. In the future **,** we may **need to** raise **additional** capital, including pursuant to ~~a~~ shelf registration ~~statement~~ **statements we may** ~~filed~~ - **file from time to time** with the SEC, potentially diluting our stockholders, restricting our operations or otherwise adversely affecting our business. Debt financing, if available, may include covenants limiting or restricting our ability to take specific actions such as incurring additional debt, expending capital or declaring dividends, or may impose financial covenants that limit our ability to achieve our business objectives. Our management has broad discretion in how to invest and spend our cash and cash equivalents and the proceeds from financings, including on capital expenditures, product development, working capital and other general corporate purposes. We may spend our cash and cash equivalents in ways that our stockholders may not agree with or that do not yield favorable returns. If we need additional capital but cannot raise it on acceptable terms, if at all, then we may not be able to meet our business objectives, financial obligations or both. If we raise additional capital but do not deploy it effectively then our business, financial condition, results of operations and prospects could be harmed and the market price of our common stock could suffer. Risks Relating to U. S. Federal Income Tax Our ability to use net operating losses **and research and development credits** to offset future taxable income **and income taxes** may be limited. As of December 31, ~~2022~~ **2023** , we had federal **U. S.** net operating loss carryforwards, or NOLs, of $ ~~249~~ **230** . ~~3~~ **5** million and **U. S.** federal research and development credit carryforwards of $ ~~22~~ **30** . ~~3~~ **5** million, which we may use to reduce future taxable income or ~~offset~~ income taxes. We have established a valuation allowance against the carrying value of these deferred tax assets. The **U. S. federal** ~~NOL~~ **NOLs** and **U. S.** federal research and development credit carryforwards began expiring in 2020. Under Sections 382 and 383 of the U. S. Internal Revenue Code, or the Code, a corporation that experiences a more- than 50 % ownership change by one or more stockholders or groups of stockholders who own at least 5 % of a company' s stock over a three- year testing period is limited in its ability to use its pre- change NOLs and other tax assets to offset future taxable income or income taxes. If we undergo a future ownership change then our ability to use our NOLs and credit carryforwards could be limited by Sections 382 and 383 of the Code. Our NOLs may also be limited under state law. As a result of these limitations, we may not be able to utilize a material portion of, or possibly any of, ~~the~~ **our** NOLs and **/ or** credit carryforwards to ~~offset~~ **reduce** future taxable income or income taxes. We could be subject to additional income tax liabilities. We are subject to income taxes in the United States and certain foreign jurisdictions. During the ordinary course of business, we use significant judgment in evaluating our worldwide income- tax obligations and we conduct many transactions for which the ultimate tax determination is uncertain. Although we believe our tax determinations are proper, the final determination of any tax audits and any possible litigation could be materially different from our historical income- tax provisions and accruals. The results of an audit or litigation could have a material effect on our operating results or cash flows in the period or periods for which that determination is made. Changes in tax laws could have a material adverse effect on our business, cash flow, results of operations or financial conditions. We are subject to tax laws, regulations and policies of several taxing jurisdictions. Changes in tax laws, as well as other factors, could cause us to experience fluctuations in our tax obligations and effective tax rates and otherwise adversely affect our tax positions and ~~/~~ **results of** ~~or~~ **our operations** ~~our tax liabilities~~ . For example, in August 2022 **, as part of the Inflation Reduction Act of 2022,** the United States enacted a 1 % excise tax on stock buybacks and a 15 % alternative minimum tax on adjusted financial statement income **. Additionally, beginning in 2022, the Code eliminated the right to deduct research and development expenditures and instead requires taxpayers to capitalize and amortize U. S. and foreign research and development expenditures over five and 15 tax years, respectively. We have accounted for these changes in accordance with our understanding of the guidance available** as ~~part~~ of the **date** ~~Inflation Reduction Act~~ of ~~2022~~ **this filing and as described in more detail in our financial statements** . The ~~U. S.~~ CHIPS and Science Act, enacted August 9, 2022, provides tax credits for semiconductor manufacturing activities within the United States, but because we outsource our semiconductor manufacturing we do not expect to be entitled to these tax credits. Many countries, as well as organizations such as the Organization for Economic Cooperation and Development, have proposed changes to existing tax laws, including a proposed 15 % global minimum tax. Any of these developments or changes in **U. S.** federal, state or international tax laws or tax rulings could adversely affect our effective tax rate and our operating results. There can be no assurance that our effective tax rates, tax payments or tax credits and incentives will not be adversely affected by these or other developments or changes in law. Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value- added or similar taxes. We do not collect sales and use, value- added or similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are either not applicable or an exemption from such taxes applies. Certain jurisdictions may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future, including as a result of a change in law. Such tax assessments, penalties and interest or future requirements may negatively affect our operating results. Risks Relating to Our Financial Reporting and Disclosure Any failure to maintain an effective system of disclosure and internal controls over financial reporting, or our ability to produce timely and accurate financial statements, could adversely affect investor confidence in us. As a public company, we must maintain effective disclosure controls and procedures and internal control over financial reporting. Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. Any failure to implement and maintain effective disclosure controls and procedures and internal control over financial reporting, including identifying material weaknesses, could cause investors to lose confidence in the accuracy and completeness of our financial statements and reports, which could adversely affect the market price of our common stock. We could also be subject to sanctions or investigations by The Nasdaq Stock Market, the SEC and other regulatory authorities. ~~We have incurred, and in the future will incur, high costs associated with being a public company. We have incurred significant legal, accounting and other costs associated with public- company reporting requirements. We ceased to be an " emerging growth company " on December 31, 2021, and are no longer eligible for the reduced disclosure requirements and exemptions applicable to " emerging growth companies. " Our loss of this status has required additional management attention and increased our costs, including legal, accounting and investor- relations- related costs. We cannot predict or accurately estimate the additional costs we are likely to incur from being a public company or the timing of these costs. We have and will continue to incur costs associated with accepted corporate governance requirements, including those of the SEC and The Nasdaq Global Select Market. We expect those governance requirements to lead to ongoing legal and financial costs and make some activities more time consuming and costly. They may also increase the difficulty and expense for us to obtain director and officer liability insurance. Although we monitor developments with respect to those requirements, we cannot predict or accurately estimate the additional costs we are likely to incur or the timing of these costs.~~ Risks Relating to Owning or Trading Our Securities The market price of our common stock has been and will likely continue to be volatile, and the value of your investment could decline significantly. The trading price of our common stock has fluctuated and is likely to continue to fluctuate substantially. The following factors, in addition to general risks and other risks described in this report, may have a material effect on the trading price of our common stock: • price and volume fluctuations in the overall stock market; • changes in operating performance, stock market valuations and volatility in the market prices of other technology companies generally, and of those in our industry in particular; • actual or anticipated quarterly variations in our results of operations or those of our competitors; • actual or anticipated changes in our growth rate relative to our competitors; • delays in end- user deployments of RAIN solutions; • announcements by us or our competitors of acquisitions, new products, significant contracts, commercial relationships or capital commitments; • supply interruptions, including semiconductor wafer or other product or component shortfalls; • developments relating to intellectual property rights or in disputes relating to those rights; • our ability to develop and market new and enhanced products on a timely basis; • commencement of, or our involvement in, litigation; • changes in our board of directors or management; • changes in governmental regulations or in the status of our regulatory approvals; • unstable political and economic conditions, including instability resulting from wars and other armed conflicts, such as ~~Russia invading~~ **those in** Ukraine **and the Gaza Strip, or geopolitical tensions, such as those between the U. S., China and Taiwan** ; • the trading volume of our stock; • actual or perceived security breaches **or incidents** ; • limited public float; • any future sales of our common stock or other securities; • financial analysts dropping or reducing their coverage of us; changes in financial estimates by analysts who do cover us; or our failure to meet analyst estimates or investor expectations; • fluctuations in the values of companies that investors perceive to be comparable to us; • the financial projections we may provide to the public, as well as any changes in those projections or our failure to meet those projections; and • general economic conditions and slow or negative growth in the markets in which we operate. Technology stocks like ours have experienced extreme price and volume fluctuations, often unrelated or disproportionate to the company' s underlying operating performance. Stock price volatility can cause stockholders to institute securities class- action litigation or stockholder derivative litigation, as occurred to us between 2018 and 2020. If any of our stockholders were to **sue** ~~bring a lawsuit against~~ us, the defense and disposition of the lawsuit could be costly and divert the time and attention of our management, harm our operating results and negatively impact the trading price of our common stock. Transactions relating to the 2021 Notes may affect our stock' s value. If the 2021 Notes are converted by holders, then we are entitled to deliver cash, stock or any combination of cash or stock, at our election. If we elect to deliver stock, the ownership interests of our existing stockholders will be diluted, and public market sales of stock issued upon a conversion could decrease our stock price. Anticipated future conversions of the 2021 Notes into stock could also decrease our stock price, as could short selling by holders of the 2021 Notes to hedge their positions. In December 2019, we issued ~~convertible senior notes due December 15, 2026, or~~ the 2019 Notes. When we did so we entered into privately negotiated capped- call transactions with financial counterparties to mitigate the dilutive impact on the Company above a given stock price. We left those capped- call transactions intact after we acquired the remainder of the outstanding 2019 Notes in June 2022. From time to time, the financial counterparties to the capped calls may modify their hedge positions by entering into or unwinding various derivative transactions involving our stock or by purchasing or selling our stock or other securities of ours in secondary market transactions prior to the maturity of the capped calls. This activity could cause a decrease in our stock price. For more information on the 2019 Notes, the 2021 Notes and the capped- call transactions, see Note ~~6~~ **8** of our consolidated financial statements included elsewhere in this report. Our principal stockholders and management own a significant percentage of our stock and are able to exercise significant influence over matters subject to stockholder approval. As of December 31, ~~2022~~ **2023** , our executive officers, directors and principal stockholders, together with their respective affiliates, beneficially owned approximately ~~22~~ **55** . ~~0~~ **7** % of our stock. As a result, our executive officers, directors and principal stockholders may be able to significantly influence, in their capacity as stockholders, matters requiring approval by our stockholders, including electing directors and approving mergers, acquisitions or other transactions. They may have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This ownership concentration could have the effect of delaying or preventing a change in our control or otherwise discouraging a potential acquirer from attempting to obtain control of us, which in turn could have a material adverse effect on our stock price. This ownership concentration could also prevent attempts by our stockholders to replace or remove our board of directors or management. We may not have sufficient cash flow or access to cash necessary to satisfy our obligations under the 2021 Notes, and our current and future indebtedness may restrict our business. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance any current or future indebtedness, including the 2021 Notes, or to make cash payments in connection with any conversion of the 2021 Notes or upon any fundamental change if holders require us to repurchase their 2021 Notes for cash, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate sufficient future cash from operations to service our indebtedness and make necessary capital expenditures. If we are unable to generate sufficient cash flow, then we may be required to pursue other alternatives, such as selling assets, restructuring indebtedness or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance any of our indebtedness, including the 2021 Notes, will depend on the capital markets and our financial condition at that time. We may not be able to pursue these alternatives on favorable terms or at all, which could result in us defaulting on our debt obligations. Our existing and future indebtedness could have important consequences to our stockholders and significant effects on our business. For example, it could: • make it more difficult for us to satisfy our debt obligations, including the 2021 Notes; • increase our vulnerability to general adverse economic and industry conditions; • require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the cash available to run our business; • limit our flexibility in planning for, or reacting to, changes in our business or in our industry; • restrict us from exploiting business opportunities; • place us at a competitive disadvantage compared to our competitors that have less indebtedness; and • limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions, debt service requirements, executing our business strategy or for other purposes. Anti- takeover provisions in our charter documents and under Delaware or Washington law could prevent, delay or impede an acquisition of us and constrain our stock price. Provisions of our certificate of incorporation and our bylaws may delay or discourage transactions involving an actual or potential change in our control or ~~change~~ in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. These provisions could therefore adversely affect our stock price. Among other things, our certificate of incorporation and bylaws: • permit our board of directors to issue up to 5, 000, 000 shares of preferred stock, with any rights, preferences and privileges as they may designate; • provide that the authorized number of directors may be changed only by resolution of the board of directors; • provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum ~~; • divide our board of directors into three classes, each of which stands for election once every three years (subject to gradual declassification beginning at the 2021 annual meeting of stockholders, such that our board of directors will be fully declassified beginning at the 2023 annual meeting of stockholders)~~ ; • restrict the forum for certain litigation against us to Delaware; • require that any action taken by our stockholders be effected at a duly called annual or special meeting of stockholders and not by written consent; • provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and also specify requirements as to the form and content of a stockholder' s notice; • do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any uncontested election of directors to elect all of the directors standing for election, if they should so choose); and • provide that special meetings of our stockholders may be called only by the chair of the board, our chief executive officer or the board of directors. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any " interested " stockholder for a period of three years following the date on which the stockholder became an " interested " stockholder. Likewise, because our principal executive offices are located in Washington, the anti- takeover provisions of the Washington Business Corporation Act may apply to us under certain circumstances now or in the future. These provisions prohibit a " target corporation " from engaging in any of a broad range of business combinations with any stockholder constituting an “ acquiring person ” for a period of five years following the date on which the stockholder became an “ acquiring person. ” Our bylaws include provisions that could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees. Our bylaws provide that, unless we otherwise consent in writing, the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit stockholders’ ability to bring a claim in a judicial forum favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.