Risk Factors Comparison 2024-04-01 to 2023-03-30 Form: 10-K

Legend: New Text ~~Removed Text~~ Unchanged Text Moved Text Section

We are subject to various risks that may materially harm our business, prospects, financial condition and results of operations. An investment in our common stock is speculative and involves a high degree of risk. In evaluating an investment in shares of our common stock, you should carefully consider the risks described below, together with the other information included in this report. The risks described below are not the only risks we face. If any of the events described in the following risk factors actually occurs, or if additional risks and uncertainties later materialize that are not currently known to us or that we currently deem immaterial, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our common stock could decline, and you may lose all or part of your investment in our shares. The risks discussed below include forward- looking statements, and our actual results may differ substantially from those discussed herein. Risks Related to the ~~CompanyWe~~ -- **Company We** lack an established operating history on which to evaluate our business and determine if we will be able to execute our business plan. We have also incurred losses in prior periods, expect to incur losses in the future, currently generate ~~no product~~ **limited commercial** revenue and we may not achieve or maintain profitability in the future. We have a limited operating history that makes it difficult to evaluate our business. Our focus is on the development and commercialization of our B- TRAN ™ technology. We cannot say with certainty when we will successfully commercialize our B- TRAN ™ technology, if ever, and thus we may not generate ~~any product~~ **significant commercial** revenue in the near future, or ever. Since inception, we have sustained approximately $ ~~87~~ **97** . ~~1~~ **0** million in net losses and we had net losses for the years ended December 31, **2023 and** 2022 ~~and 2021~~ of approximately $ **10. 0 million and $** 7. 2 ~~million and $ 4. 8~~ million, respectively. We expect to incur losses and negative cash flows from operating activities at least until such time as we have commercialized our B- TRAN ™ technology and developed a substantial and stable revenue base. We cannot assure you that we can develop a substantial and stable revenue base or achieve or sustain profitability in the future. We have been funding operations primarily through the sale of common stock. We currently generate ~~no product~~ **limited commercial** revenue ~~, although we expect initial modest product revenue in late 2023~~ , and, in order to fund our operations until we are profitable, we may need to raise additional funds and such funds may not be available on commercially acceptable terms, if at all. If we are unable to raise funds on acceptable terms if and as needed, we may not be able to execute our business plan and generate sustainable revenue. This may seriously harm our business, financial condition and results of operations. In the event we are not able to continue operations, you will likely suffer a complete loss of your investment in our securities. Product development **and commercialization** is an inherently uncertain process, and we may encounter unanticipated development **and / or commercialization** challenges and may not be able to meet our product design and **/ or** commercialization milestones. Prototype and ~~other pre- commercial, as well as~~ product ~~,~~ development and testing may be subject to unanticipated and significant delays, expenses and technical or other problems. We cannot guarantee that we will successfully achieve our milestones within our planned timeframe or ever. We have developed and tested **discrete** ~~prototypes of~~ B- TRAN ™ devices **and SymCool ™ power modules** . We cannot predict whether future prototypes of **, or actual,** ~~the B- TRAN ™ and~~ B- TRAN ™ products will achieve results consistent with our ~~prototype testing to date,~~ expectations, third- party simulations or the expectations of our potential customers and / or licensees. A prototype or product could cost significantly more than expected or the prototype or product design fabrication process could uncover problems that are not consistent with our expectations. Prototypes of B- TRAN ™ devices **and new product introductions** are a material part of our business plan, and if they are not proven to be successful, our business and prospects would be harmed. In addition, for both testing and commercialization purposes, the B- TRAN ™ ~~will need~~ **needs** to be packaged and paired with an efficient double- sided driver. ~~The driver~~ **Driver** development is subject to similar risks as the B- TRAN ™ prototype and product development including being subject to unanticipated and significant delays, expenses and technical or other problems. More generally, the ~~future~~ commercialization of products using our technology and designs may also be adversely affected by many factors not within our control, including: ● the willingness of market participants to try new products incorporating our technology and the perceptions of these market participants of the safety, reliability, functionality and cost effectiveness of these products; ● the emergence of newer, possibly more effective technologies; ● the ~~future~~ cost and availability of the raw materials and components needed to manufacture and use products incorporating our technology; and ● the adoption of new regulatory or industry standards that may adversely affect the use or cost of products incorporating our technology. Accordingly, we cannot predict that products incorporating our technology will be accepted on a scale sufficient to support **the** development of mass markets for them. ~~10Our~~ -- **Our** semiconductor fabrication partners may be unable to successfully and cost- effectively develop and implement new process steps necessary for bidirectional semiconductor device ~~development~~ **fabrication** at scale. While the ~~manufacturing~~ **fabrication** of B- TRAN ™ ~~devices~~ **wafers** uses conventional equipment and process steps, there is heightened risk in the fabrication process due to the handling and processing of both sides of the wafer and achieving the required front to back alignment of the features. Two- sided wafer processing and handling is necessary as the B- TRAN ™, unlike conventional power semiconductor devices, is a two- sided bidirectional device. In addition, the cost to manufacture a B- TRAN ™ will be impacted by the number of process steps, the processing time and the size of the wafer. ~~To date,~~ B- TRAN ™ **fabrication currently** ~~prototypes under development have utilized~~ **utilizes** smaller **6** ~~4- inch and 5~~ - inch diameter wafers resulting in fewer die per wafer. As a result, the cost per die is higher than if larger diameter wafers were utilized. For example, if an 8- inch wafer was used it would have ~~four times the area and thus could produce four times as many die as a 4- inch wafer, or~~ almost two and one half times the area and produce almost two and one half times as many die as a 6- inch wafer, resulting in a lower cost per die. If **we, in**

partnership with our semiconductor fabrication partners **,** are unable to successfully and cost- effectively develop and implement new process steps necessary for bidirectional semiconductor device **fabrication** ~~development at the prototype stage or~~ at scale **or encounter unforeseen issues in transitioning to larger diameter wafers** , our business, financial condition and results of operations would be materially and adversely affected. There are a limited number of semiconductor fabrication development facilities in the United States and abroad. Furthermore, **from time to time** ~~in 2021, 2022 and thus far in 2023~~ there has been insufficient fabrication capacity for, and shortages of, certain semiconductor devices and related electronic components ~~, although this has not materially impacted us to date~~ . ~~Continued or further disruptions~~ **Disruptions** to the supply chain for semiconductors and related electronic components could delay our critical development and commercialization activities and / or result in significantly higher costs for us for semiconductor components and / or semiconductor foundry and related services. This risk is magnified for us as a small company as we are at a disadvantage relative to larger, more established companies in securing semiconductor fabrication capacity as we do not have longstanding relationships with semiconductor foundries and, as a new technology, it will take time to scale to the volume necessary to attract and retain certain semiconductor foundries. There are also a limited number of well- capitalized semiconductor fabricators working with the ~~small~~ **smaller** diameter wafers ~~necessary~~ **currently utilized by us** for ~~our current~~ development **and production** . Our inability to engage such partners in a cost- effective manner, the loss of any fabrication ~~development~~ partner once engaged or industry supply chain disruptions may materially delay our development efforts and may have a materially adverse effect on our business, financial condition and results of operations. We, or our potential future licensees, must achieve design wins to obtain customers, although design wins achieved may not necessarily result in substantial sales or licensing revenue to us. We anticipate that our **current and** future designs will typically be integrated into systems by our **current and** potential customers. This may result in the need to customize our designs, generally the packaging and / or driver rather than the B- TRAN ™ die, for certain applications or customers. We will need to work with semiconductor partners and / or manufacturers early in their design cycles to ensure that our designs will meet the requirements of their systems. Manufacturers typically choose one or two vendors to provide the components for use in their systems. Selection as one of these vendors is called a design win. It is critical that we, or our licensees, achieve these design wins in order to obtain customers and generate sales and / or licensing revenue. We currently have a test and evaluation program whereby **program participants test** ~~certain potential customers will be testing~~ our B- TRAN ™ technology for use in their applications. We can provide no assurance that participation by a potential customer in our test and evaluation program will result in a design win. We believe that equipment manufacturers often select their suppliers based on factors including long- term relationships and end user demand. Accordingly, we may have difficulty achieving design wins from equipment manufacturers as our products **are, and new products** will be **,** new entrants into the market. Our efforts to achieve design wins or assist our potential future licensees in achieving design wins may be time consuming and expensive and may not be successful. If we or our potential future licensees are not successful in achieving design wins, or if we or our potential future licensees do achieve design wins but the customers' systems that utilize our designs are not successful, our business, financial condition, and results of operations could be materially and adversely impacted. Even if we, or our potential future licensees, achieve design wins, the timing of generation of sales and / or licensing revenue will be dependent on the customer' s product design cycle. There may be significant time between when we, or our potential future licensees, achieve design wins and when we generate initial sales and / or licensing revenue from these design wins. Significant delays in our customers' product design cycles, or long product design cycles by these customers, could materially and adversely affect our business, financial condition and result of operations. ~~11Once~~ -- **Once** a manufacturer chooses a component for use in a particular system, it is likely to retain that component for the life of that system. In addition, the sales cycle into certain ~~potential~~ **of our** target markets **,** such as the automotive market **,** are typically very long. Our future growth could experience material and prolonged adverse effects if we fail to achieve design wins or if the design wins do not result in substantial revenue for us within a reasonable timeframe. We previously received grant funds from the United States for the development of a bidirectional switch. In certain instances, the United States may obtain title to inventions related to this effort. If we were to lose title to those inventions, we may have to pay to license them from the United States in order to manufacture the inventions. If we were unable to license those inventions from the United States, it could slow down our product development. In conjunction with the ARPA- E grant we received from the Department of Energy, we granted to the United States a non- exclusive, nontransferable, irrevocable, paid- up license to practice or have practiced for or on behalf of the United States inventions related to a bidirectional switch and made within the scope of the grant. If we failed to disclose to the Department of Energy an invention made with grant funds that we disclosed to patent counsel or for publication, or if we elect not to retain title to the invention, the United States may request that title to the subject invention be transferred to it. We also granted " march- in- rights " to the United States in connection with any bidirectional switch inventions in which we choose not to retain title, if those inventions were made under the ARPA- E grant. Pursuant to the march- in- rights, the United States has the right to require us, any person to whom we have assigned our rights, or any exclusive licensee to grant a non- exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant upon terms that are reasonable. If the license is not granted as requested, the United States has the right to grant the license if it determines that we have not achieved practical application of the invention in the field of use, the action is necessary to alleviate health or safety needs, the action is necessary to meet requirements for public use specified by Federal regulations and such requirements have not been satisfied, or the action is necessary because an agreement to manufacture the invention in the United States has not been obtained or waived or because any such agreement has been breached. If we lost title to the United States as a result of any of these events, we would have to pay to license the inventions, if needed, from the United States to manufacture the applicable bidirectional switch. If we were unable to license those inventions from the United States, it could materially and adversely impact our business, financial condition and results of operations. As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement or competitors could infringe upon our intellectual property. We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights. As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement of intellectual property rights. In that event, we may incur significant costs to defend against such a claim even if the claim proves to have no merit. In addition, some of our future competitors will be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. If we do not prevail in this type of litigation, we may be required to: pay monetary damages; stop commercial activities relating to our technology; obtain one or more licenses in order to secure the rights to manufacturing or marketing certain future products incorporating our technology; or attempt to compete in the market with substantially similar products. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue some or all of our operations. We may face significant expenses and liability in connection with the protection of our intellectual property and, if we are unable to successfully protect our rights or resolve intellectual property conflicts with others, our business or financial condition could be adversely affected. ~~12Our~~ -- **Our** success depends in large part on our proprietary technology for which we seek protection under patent, copyright, trademark and trade secret laws in the United States and abroad. Such protection is also maintained in part using proprietary information and inventions agreements and non- disclosure agreements. The agreements we use in an effort to protect our intellectual property, confidential information, and other unpatented proprietary information may be ineffective or insufficient to prevent unauthorized use or disclosure of such trade secrets and information. A party to one of these agreements may breach the agreement and we may not have adequate remedies for such breach. As a result, our trade secrets, confidential information, and other unpatented proprietary rights and information may become known to others, including our competitors. Using third- party manufacturers, both domestically and abroad, may increase the risk of misappropriation of our trade secrets, confidential information and other unpatented proprietary information. Protection of our technology is important to us so that we may offer our future customers proprietary products unavailable from our competitors, and so that we may prevent our competitors from using technology that we have developed or exclusively licensed. If we are unable to effectively protect our intellectual property, our business and competitive position may be adversely affected. We may license our technology in the future; however the terms of any such agreements may not prove to be advantageous to us. If the license agreements we may enter into do not prove to be advantageous to us, our business and results of operations will be adversely affected. Although we **are** ~~intend to~~ initially ~~employ~~ **employing** a product sales strategy for products incorporating our B- TRAN ™ technology, we also expect to employ a licensing strategy for the production and potentially the sale of our ~~future~~ B- TRAN ™ products in certain instances. However, we may not be able to secure license agreements with semiconductor fabrication partners or other strategic partners at all or on terms that are advantageous to us. Furthermore, the timing and volume of revenue earned from license agreements will be outside of our control. If the license agreements we may enter into in the future do not prove to be advantageous to us, our business and results of operations will be adversely affected. Future revenue may rely on the marketing and sales efforts of third parties whom we do not control. The marketing and sale of our future products to end user customers may be conducted by us, **distributors, sales representatives,** future licensees of our technology or **likely** a combination thereof. Consequently, **the** commercial success of our products may depend, to a great extent, on the efforts of others. We may not be able to identify, maintain or establish appropriate relationships in the future. We can give no assurance that any such third parties will focus adequate resources on selling our products or will be successful in selling them. In addition, these third parties may require customization of our designs or other concessions that could reduce the potential profitability of these relationships. Failure to develop favorable licensing relationships in our target markets may adversely affect our commercialization schedule and, to the extent we enter into such relationships, the failure of our licensees to focus adequate resources on selling our products or be successful in selling them or to meet their monetary obligations to us may adversely affect our financial condition and results of operations. A material part of our success depends on our ability to manage third- party resources. Our failure to properly select, manage and retain qualified third- party resources could materially and adversely affect our results of operations and relations with our partners and future customers. Our development efforts are highly dependent on third- party resources for semiconductor expertise and manufacturing. These third- party resources include experts in power semiconductor switches and drivers, semiconductor fabrication suppliers, and other resources within the power switch ecosystem. The loss of one or more of our third- party resources could have a material adverse effect on the timing of our development **and / or commercialization** efforts which could, in turn, result in our business and results of operations being adversely affected. We also rely on our semiconductor fabrication partners and packaging firms to develop ~~prototype and, in the future,~~ commercial devices and modules. There can be no assurance that these manufacturing partners will provide devices and / or modules in a timely and cost- efficient manner, provide quality devices and / or modules or otherwise meet our needs and expectations. Our ability to manage such relationships and timely replace such partners, if necessary, is critical to our success. The loss of and our failure to timely replace third- party resources, fabrication partners and other suppliers within the power switch ecosystem, should that become necessary, could materially and adversely affect our results of operations and relations with our partners and future customers. See also " — Our semiconductor fabrication partners may be unable to successfully and cost- effectively develop and implement new process steps necessary for bidirectional semiconductor device ~~development~~ **fabrication** at scale. " ~~13Supply~~ -- **Supply** chain disruptions could interrupt product manufacturing and global logistics and increase product costs. We currently rely upon the facilities of our semiconductor fabricator **and packaging** partners in the ~~western~~ United States **and abroad** ~~, including California,~~ to support our ~~business~~ **development and production** as well as vendors throughout the United States and abroad to supply silicon wafers and other materials and processing and engineering capabilities and expertise. In **recent years** ~~2021, 2022 and thus far in 2023~~ , there have been global industry- wide logistics challenges, including those caused by COVID- 19 outbreaks. While these logistics challenges have caused some disruption in our business, these disruptions **were** ~~have been~~ manageable and their impact on us ~~has~~ **was** not ~~been~~ significant ~~to us to date~~ . Future facility closures and / or disruptions may occur if additional **pandemic** ~~COVID- 19~~ breakouts **or geopolitical events** occur in areas where we rely on third parties. We and certain of our suppliers also rely on international shipping to transport wafers, circuit boards and other electronic components to us and our other suppliers. During the **COVID- 19 outbreak** ~~years ended December 31, 2021 and 2022~~ , international shipping to the U. S. was disrupted and delayed due to congestion in west coast ports and other causes. **Future** ~~Continued or additional~~ delays in shipping may cause us or our suppliers to have to use more expensive air freight or other more costly methods. In addition, global inflation has contributed to already higher incremental freight and component costs and such inflation may continue to result in higher costs. Logistics delays could result in delays to critical development **and commercialization** activities. Further, failure to adequately fabricate and timely ship our ~~prototypes and, when commercially available,~~ products to ~~potential~~ customers could lead to delays in their testing and evaluation and / or adoption of our technology, lost potential revenue, failure to meet customer demand and strained relationships with customers ~~.~~ ~~Despite our actions to mitigate these impacts, we may be impacted by global logistics challenges in 2023. Our business, including our supply chain, liquidity, financial condition and financial results may be materially adversely disrupted and impacted due to the COVID- 19 pandemic. In 2020, 2021 and 2022, the COVID- 19 pandemic drove global uncertainty and disruption and spread throughout the geographic region in which we operate our business and the geographic regions where our suppliers, business partners and potential customers are located. While the COVID- 19 pandemic caused some disruption to our business in 2020, the COVID- 19 pandemic has not had a material adverse impact on our operations to date. Potential financial impacts associated with the COVID- 19 pandemic include, but are not limited to, delays in critical development and commercialization activities, including delays due to supply chain disruptions, and temporary and potential incremental costs associated with mitigating the effects of the COVID- 19 pandemic, including increased freight and logistics costs and other expenses. The COVID- 19 pandemic is ongoing, and its dynamic nature, including uncertainties relating to the ultimate spread of the virus and its related variants, the duration of the pandemic, the timing, scope and efficacy of vaccination efforts and additional actions that may be taken by governmental authorities in response to the pandemic, makes it difficult to forecast any effects on our results of operations for 2023 and thereafter. Furthermore, we rely upon the facilities of our semiconductor fabricator partners in the western United States, including California, to support our business as well as vendors throughout the United States and abroad to supply silicon wafers and other materials and processing and engineering capabilities and expertise. Accordingly, a significant portion of our supply chain is located in California and other locations domestically and abroad where the COVID- 19 impacts have been in the past, and in the future may be, significant. We may also increasingly utilize partners abroad and the impact of the COVID- 19 pandemic on these partners, and thereby to us, cannot be predicted at this time. The COVID- 19 pandemic has resulted in significant governmental measures being implemented to control the spread of the virus and its related variants, including, among others, restrictions on manufacturing and the movement of employees in many states or regions of these countries. As a result of COVID- 19 and the measures designed to contain the spread of the virus and its related variants, our suppliers may not have the materials, capacity, or capability to supply us the components needed to continue our development efforts according to our schedule. Any reduction in manufacturing or supply capacity may reduce or even halt the supply of necessary components needed for us to continue these activities. Further, there may be logistics issues, including our ability and our supply chain' s ability to operate, and transportation demands that may cause further delays. See also " — Supply chain disruptions could interrupt product manufacturing and global logistics and increase product costs. " If our suppliers' operations are curtailed, we may need to seek alternate sources of supply, which may be more expensive. Alternate sources may not be available or may result in delays in shipments to us from our supply chain, each of which would affect our results of operations. While disruptions and restrictions on our operations, including temporary closures of the facilities of our suppliers, as well as general limitations on movement in the region have occurred and may occur in the future, the duration of any potential production and supply chain disruption, and related financial impact, cannot be estimated at this time. Should production and distribution closures occur, the impact on our supply chain could have a material adverse effect on our results of operations, financial condition and cash flows. See " — Risks Related to the Company — Our semiconductor fabrication partners may be unable to successfully and cost- 14effectively develop and implement new process steps necessary for bidirectional semiconductor device development at scale. " The COVID- 19 pandemic may also delay the commercialization of our B- TRAN ™ technology, which would materially and adversely affect our business and operating results~~ . We may need additional financing to execute our business plan and fund operations, which additional financing may not be available on commercially reasonable terms or at all. We have and, prior to profitable commercialization at scale, may continue to rely on raising funds from investors and / or other sources to support our research and development activities and execute our business plan. Macro- economic conditions in the United States and abroad **, like those currently in effect,** may result in a tightening of the credit markets and / or less capital available for small public companies, which may make it more difficult for us to raise capital on commercially reasonable terms or at all. ~~Also, the COVID- 19 pandemic has caused significant volatility in the global financial markets, which could increase the cost of capital and adversely impact our ability to raise additional capital, which could negatively affect our liquidity in the future.~~ If we are unable to raise funds on acceptable terms if and as needed, we may be forced to curtail our operations or even cease operating altogether. Therefore, unfavorable macroeconomic conditions, particularly in the United States, including as a result of ~~COVID- 19 or~~ inflation, and any ~~resulting~~ recession or slowed economic growth, could have an outsized negative impact on us. This may seriously harm our business, financial condition and results of operations. A failure to obtain additional government grants could have a material adverse effect on our development efforts and our ability to fund operations and execute on our business plan. We expect to fund a portion of our development efforts with funds received under government grants. However, we may not be awarded any such grants in the future, any such grant awards may be insufficient to fund a meaningful portion of our development spending and / or the timing of the receipt of any such award or awards may not coincide with the planned timing of our development efforts. Grants are subject to long procurement cycles, typically 6 to 12 months, and there may not be open grant solicitations for topics relevant to our B- TRAN ™ technology. Grant topics are typically identified 1 to 2 years prior to the opening of the grant solicitation and the windows to submit proposals are discrete time periods. Further, the award of grants is a subjective process and government agencies often do not provide detailed feedback on why a grant was not received. A factor that could negatively impact our ability to obtain government grants is that our technology is ~~not yet~~ **in the early stages of** ~~commercialized~~ **commercialization** . If, in the future, grant agencies determine that our technological readiness is not sufficiently advanced for a funded demonstration incorporating B- TRAN ™ or potential partners determine that our technological readiness is not sufficient to partner with us on grant proposals, we may be unable to obtain additional government grants. Overall, there is a high degree of uncertainty in obtaining grants ~~, particularly for technologies that have not been demonstrated with commercial devices,~~ and we can provide no assurance that we will be able to obtain additional government grants to offset a significant, or any, portion of our development spending. If we do not obtain additional grants or our efforts to obtain additional grants take longer than expected to be successful, we will need to rely on other means to fund our development. We are highly dependent on the services of key members of our management and technical teams. Our inability to retain these individuals could impede our business plan and growth strategies, which could have a negative impact on our business and the value of your investment. Our ability to implement our business plan depends, to a critical extent, on the continued efforts and services of key members of our management and technical teams. If we unexpectedly lose the services of any of these persons during this important time in the development and commercialization of our B- TRAN ™ technology, the loss may result in a delay in the implementation of our business plan and plan of operations. We can give no assurance that we could find satisfactory replacements for these individuals **within a reasonable time or** on terms that would not be unduly expensive or burdensome to us. We do not currently carry a key- man life insurance policy that would assist us in recouping our costs in the event of the death or disability of any of these persons. In addition, as a small team we will need additional commercial and semiconductor expertise to successfully develop products and **further** commercialize our technology. We can give no assurance that we will be able to identify and secure the necessary expertise at the appropriate time or at all. ~~15Our~~ -- **Our** operating results for any quarterly reporting period may fluctuate significantly depending on the timing and pace of our development spending and costs to commercialize our technology. Our research and development costs may vary significantly from quarter to quarter depending on the current phase of development and commercialization of our technology and the timing of ~~pre- commercial~~ semiconductor fabrication, commercial production and revenue generation and negotiations with potential strategic partners. We also may intentionally accelerate our development **and / or commercialization** costs or may be faced with unexpected delays or challenges with development **and / or commercialization** that could significantly impact our operating results. Significant adverse fluctuations in our research and development spending and other operating costs from period to period could adversely affect the market price for our common stock. New technologies in the power semiconductor switch industry may supplant our technology in this market, which would harm our business and operations, and we may not be able to compete effectively in this industry and with any such new technologies. The power semiconductor switch industry is subject to significant technological change. Our future success will depend on the cutting- edge relevance of our technology, and thereafter on our ability to appropriately respond to changing technologies and changes in function of products and product quality. If new technologies supplant our technology, our business would be adversely affected and we will have to revise our plan of operation. We or our potential licensees could be competing against large power semiconductor device suppliers with substantially greater resources than us, financial and otherwise. These competitors may also have more comprehensive product lines, broader market presence, longer standing relationships with customers, longer operating histories, greater manufacturing and / or product development capabilities, stronger brand recognition, and greater marketing resources than we and / or our licensees have. If any of these competitors develop products to compete with our technology, we may not be able to **successfully** commercialize our technology and our technology may not result in sufficient **product revenue and / or sufficient** , or any, ~~product and / or~~ licensing revenue. We may not be able to use some or all of our net operating loss carryforwards to offset future income. We have net operating loss carryforwards due to prior period losses generated before January 1, ~~2023~~ **2024** which if not utilized will begin to expire in 2031 for net operating loss carryforwards prior to 2018 and which do not expire for net operating loss carryforwards for 2018 and thereafter. If we are unable to generate sufficient taxable income to utilize our net operating loss carryforwards, pre- 2018 carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an " ownership change " (generally defined as a greater than 50 % change (by value) in its equity ownership over a three- year period) is subject to limitation on its ability to utilize its pre- change net operating loss and credit carry- forwards, or net operating losses, to offset future taxable income. We may have experienced one or more ownership changes under these Sections in connection with our initial public offering and one or more subsequent financings. However, we do not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carryforwards until such time we project we will be able to utilize these tax attributes. In addition, future changes in our stock ownership, which may be outside of our control, may trigger an ownership change, as may future equity offerings or acquisitions that have equity as a component of the purchase price. If an ownership change has occurred or does occur in the future, our ability to utilize our net operating losses to offset income if we attain profitability may be limited. Risks Related to Owning Our Common ~~StockThe~~ --- **Stock The** public market for our common stock may be volatile. This may affect the ability of our investors to sell their shares as well as the price at which they sell their shares. The market price for our shares has experienced significant price and volume fluctuations. We cannot predict whether the price of our common stock will rise or fall. Our stock price may be significantly affected by factors such as, among others: ● variations in the volume of trading activity; ● actual or anticipated fluctuations in our liquidity, financial condition and operating results; ~~16~~ ● quarterly and yearly operating results compared to market expectations; ● quarterly and yearly operating results of other companies in our industry compared to market expectations; ● general trends in markets we expect to serve; ● competition from existing products or new products that may emerge; ● future announcements concerning our business or our competitors' businesses; ● additions or departures of key management or other technical personnel; ● the public' s reaction to our press releases, other public announcements and filings with the ~~Securities and Exchange Commission (the "~~ SEC ~~")~~ ; ● issuances or sales, or expected issuances or sales, of our capital stock; ● disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies; ● litigation involving us, our general industry or both; and ● changes in state or federal regulations affecting us and our industry. Furthermore, in recent years the stock market has experienced extreme price and volume fluctuations that are unrelated or disproportionate to the operating performance of the affected companies. Such broad market fluctuations may adversely affect the market price of our common stock. In addition, price volatility may be greater if the public float and trading volume of our common stock is low. As a result, you may suffer a loss on your investment. We have the right to issue, and have in the past issued, shares of preferred stock. If we were to issue additional preferred stock, it may have rights, preferences and privileges that may adversely affect the common stock. We are authorized to issue 10, 000, 000 shares of " blank check " preferred stock, with such rights, preferences and privileges as may be determined from time- to- time by our Board of Directors (" Board "). Our Board is empowered, without stockholder approval, to issue preferred stock in one or more series, and to fix for any series the dividend rights, dissolution or liquidation preferences, redemption prices, conversion rights, voting rights, and other rights, preferences and privileges for the preferred stock. The issuance of shares of preferred stock, depending on the rights, preferences and privileges attributable to the preferred stock, could reduce the voting rights and powers of our common stock and the portion of our assets allocated for distribution to common stockholders in a liquidation event, and could also result in dilution in the book value per share of our common stock. The preferred stock could also be utilized, under certain circumstances, as a method for raising additional capital or discouraging, delaying or preventing a change in control of the Company, to the detriment of the investors in our common stock. We cannot assure you that we will not, under certain circumstances, issue shares of our preferred stock. At December 31, ~~2022~~ **2023** , we had no shares of preferred stock outstanding. We have not paid dividends in the past and have no immediate plans to pay dividends. We plan to reinvest all of our earnings, to the extent we have earnings, in order to market our products and to cover operating costs and to otherwise become and remain competitive. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. As a result, only appreciation in the price of our common stock, which may never occur, will provide a return to stockholders. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on our common stock. ~~17Shares~~ -- **Shares** eligible for future sale, including warrants and options exercisable into shares of our common stock, may cause dilution to our existing stockholders and may adversely affect the market for our common stock. Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to sell equity or equity- related securities in the future at a time and price that we deem appropriate. At February 28, ~~2023~~ **2024** , we had ~~5~~ **6** , ~~924~~ **005** , ~~680~~ **031** shares of common stock outstanding and 253, 828 pre- funded warrants with an exercise price of $ 0. 001 that are included in our computation of basic earnings per share. Shares beneficially owned by our affiliates, if any, and employees are subject to volume and other restrictions under Rules 144 and 701 under the Securities Act, various vesting agreements, our insider trading policy and / or any applicable 10b5- 1 trading plan. Shares that are not beneficially owned by our affiliates and employees generally can be freely sold in the public market, potentially subject in some cases to restrictions under Rule 144. At February 28, ~~2023~~ **2024** , we had 1, ~~637~~ **640** , ~~584~~ **274** potentially dilutive shares outstanding, exclusive of pre- funded warrants to purchase shares of common stock that are considered outstanding common shares and included in our computation of basic earnings per share, and we may grant additional options, restricted stock units, performance stock units, other stock- based awards and / or warrants in the future. The holders of vested options or warrants, including pre- funded warrants, may exercise their options and / or warrants and sell a large number of shares. Any sale of a substantial number of shares of our common stock may have a material adverse effect on the market price of our common stock. Raising additional capital, if necessary, may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies. We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and licensing arrangements. To the extent that we raise additional capital through the sale or issuance of equity, warrants or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. If we raise capital through debt financing, it may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic partnerships or licensing agreements with third parties, we may have to relinquish valuable rights to our technologies, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds if and when needed, we may be required to delay, limit, reduce or terminate our development and commercialization efforts. Our **charter documents and Delaware law may inhibit a takeover that stockholders consider favorable. Our certificate of incorporation (as amended and restated to date, our " certificate ") and our bylaws (as amended and restated to date, our " bylaws ") and applicable provisions of Delaware law may delay or discourage transactions involving an actual or potential change in 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. The provisions in our certificate and bylaws: ● authorize our Board to issue preferred stock without stockholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us; ● limit who may call stockholder meetings; ● do not permit stockholders to act by written consent; ● do not provide for cumulative voting rights; and ● provide that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum. In addition, Section 203 of the Delaware General Corporation Law may limit our** ability to ~~raise capital is limited by~~ **engage in any business combination**

with a person who beneficially owns 15 % or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of ~~the~~ **three years following** ~~Securities Act and SEC rules and regulations. Under current SEC rules and regulations, because~~ the ~~aggregate market value~~ **share acquisition. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price** of our common stock ~~held~~ **. If securities or industry analysts do not publish or do not continue to publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline. The trading market for our common stock may be influenced** by ~~non- affiliates,~~ **the research and reports that industry or securities analysts publish about us or** ~~or~~ **our** ~~public float~~ **business. In 2023** , **one securities analyst published reports on us. If** ~~was less than $ 75 million (calculated as set forth in Form S- 3 and SEC rules and regulations) at the time of filing of~~ this ~~Annual~~ **analyst ceases coverage of our company or fails to publish** ~~Report~~ **reports** on **us regularly and /** ~~Form 10- K, the amount we can raise through primary public offerings of our~~ - **or one or more other analysts do not initiate coverage** ~~securities in any 12- month period using a registration statement~~ on ~~Form S- 3 will be limited~~ **us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume** to **decline. In addition, if** one ~~- third of our~~ - **or** ~~public float. Alternative means of raising capital through sales of our securities, including through the use of a " long form " registration statement on a Form S- 1 or in private placements of equity or debt securities, may be~~ more ~~costly~~ **analysts issues** ~~and~~ - **an** ~~time- consuming and more difficult to market to potential investors, which may have a material~~ adverse ~~effect on~~ **opinion regarding** our **stock** ~~ability to raise capital~~ , our ~~liquidity position and strategy~~ **stock price would likely decline** . ~~18~~ **ITEM 1B: UNRESOLVED STAFF COMMENTS**