

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

FORM 10-K

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

For the fiscal year ended March 31, 2023

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

For the transition period from _____ to _____

Commission file number: 000-55832

transphorm

Transphorm, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)
75 Castilian Drive
Goleta, California
(Address of principal executive offices)

82-1858829
(I.R.S. Employer
Identification No.)

93117
(Zip Code)

(805) 456-1300
(Registrant's telephone number, including area code)

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, par value \$0.0001 per share	TGAN	The Nasdaq Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes No

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

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

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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

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

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

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

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

The aggregate market value of the registrant’s common stock held by non-affiliates, as of September 30, 2022, the last business day of the registrant’s most recently completed second fiscal quarter, was approximately \$169.5 million, based on the closing price on such date as reported on the Nasdaq Capital Market. Shares of the registrant’s common stock held by each executive officer and director and by beneficial owners of ten percent or more of the registrant’s common stock have been excluded from this computation. This calculation does not reflect a determination that certain persons are affiliates of the registrant for any other purpose.

As of June 20, 2023, 59,374,057 shares of the registrant’s common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None.

Transphorm, Inc.
FORM 10-K

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Glossary of Terms and Abbreviations

The following is a glossary of technical terms used in this Annual Report on Form 10-K (this “Report”):

AC – alternating current

AEC-Q101 – Automotive Electronic Council’s electronic components stress qualification standard

AFSW – Aizu Fujitsu Semiconductor Wafer Solution Limited, the wafer fabrication facility located in Aizu Wakamatsu, Japan that is owned by our joint venture

BJT – bipolar junction transistor, a semiconductor device

Bus voltage – voltage into, out of or within connections of a power electronic system

CMOS – complementary MOS (metal oxide semiconductor), widely used semiconductor transistor architecture

D2Pak – a surface mountable version of the TO220 package

DC – direct current

Die/Chip – an individual semiconductor device on the wafer, prior to packaging

EAR – Export Administration Regulation

Epi/Epiwafer/Epimaterials – GaN device layers grown on a substrate, from which active GaN-based devices are subsequently manufactured in a wafer fabrication facility

Fab – fabrication, generally referring to a semiconductor wafer fabrication facility

FET – field effect transistor, a type of switching transistor

FIT – failure in time, referring to the expected number of device failures per billion hours of operation

GaN – gallium nitride

HEMT – high electron mobility transistor, a type of switching transistor with superior electronic properties

IGBT – insulated-gate bipolar transistor, a three-terminal power semiconductor device primarily used as an electronic switch

JEDEC – Joint Electron Device Engineering Council, an independent semiconductor engineering trade organization and standardization body that represents all areas of the electronics industry

Lossy – in the context of switching devices, subject to loss of power due to switching inefficiencies and other factors

MOCVD – metal organic chemical vapor deposition, a technique for layering GaN layers onto substrates such as a silicon substrate and making the starting GaN semiconductor material (i.e., an epiwafer)

Moore’s law – the observation that the number of transistors in a dense integrated circuit doubles about every two years

MOSFET – metal-oxide-semiconductor field-effect transistor, a type of transistor

Power converters / Inverters – electronic systems used to convert electricity from AC to DC (such as a charger), DC-AC (such as an inverter) or in some cases AC-AC or DC-DC within the systems converting from one voltage level to another

PQFN – power quad flat no lead package, a compact surface mountable package used in power semiconductors

RF – radio frequency

SCR – silicon controlled rectifier, an early semiconductor switching device

Si – silicon

SiC – silicon carbide

TO – transistor outline leaded packages commonly used in power semiconductors (such as TO220, TO247)

Risk Factor Summary

Our business is subject to significant risks and uncertainties that make an investment in us speculative and risky. Below we summarize what we believe are the principal risk factors but these risks are not the only ones we face, and you should carefully review and consider the full discussion of our risk factors in the section titled “Risk Factors,” together with the other information in this Report. If any of the following risks actually occur (or if any of those listed elsewhere in this Report occur), our business, reputation, financial condition, results of operations, revenue, and future prospects could be seriously harmed. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business.

- We have a history of losses, anticipate increasing our operating expenses and capital expenditures in the future, and may not be able to achieve or maintain profitability.
- Our recurring operating losses and our current operating plans raise substantial doubt about our ability to continue as a going concern. We need to raise capital to support our business, and this capital may be unavailable on attractive terms, if at all, and could dilute your investment. If we do not successfully complete the contemplated rights offering and asset-based debt financing, we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to fund our operations into the second half of September 2023.
- We intend to initiate a strategic review of opportunities to enhance stockholder value, and there can be no assurance that this strategic review will result in any transaction or that such transaction, if pursued, can be completed on attractive terms, or at all, or that such transaction will lead to increased stockholder value.
- Our joint venture arrangement involves numerous risks, including risks relating to the lack of full control of the joint venture, potential disagreements with our joint venture partner about how to manage the joint venture, conflicting interests of the joint venture, requirements to fund the joint venture and its business not being profitable.
- Our quarterly results of operations are likely to vary from period to period, which could cause the market price of our common stock to fluctuate or decline.
- We are exposed to foreign currency exchange rate fluctuations. Although we hedge certain currency risks, our hedging strategies may not be successful in mitigating our risks and changes in foreign currency exchange rates may adversely affect our financial condition, cash flows and results of operations.
- We may not be able to develop new technologies and products to satisfy changes in customer demand or industry standards, and our competitors could develop products that decrease the demand for our products.
- Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense.
- We must commit resources to development, design and production prior to receipt of purchase commitments and could lose some or all of the associated investment.
- Unfavorable worldwide economic conditions (including inflation), may negatively affect our business, financial condition and results of operations.
- We compete in highly competitive markets, and competitive pressures from existing and new companies may adversely impact our business and operating results.
- We rely on third-party channel partners to sell our products. If our partners fail to perform, our ability to sell our products and services could be limited, and if we fail to optimize our channel partner model going forward, our operating results could be harmed.
- We rely on limited sources of wafer fabrication, packaged products fabrication and product testing, the loss of which could delay and limit our product shipments.

- We rely on third parties for supply of raw materials and parts, assembly and test services, and transportation, among other things, and we generally cannot control their availability or conditions of supply or services.
- Because we depend on third-party manufacturers to build portions of our products, we are susceptible to manufacturing delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales, income and customers.
- Our business could be adversely affected by the effects of health epidemics or pandemics.
- An earthquake, terrorist attack or other man-made or natural disaster could negatively impact our business and operating results.
- The loss of one or more key employees or our inability to attract and retain qualified personnel could harm our business.
- If we fail to effectively manage our growth, our business, financial condition and results of operations would be harmed.
- We are subject to a number of risks associated with international sales and operations.
- Investments in us may be subject to U.S. foreign investment regulations which may impose conditions on or limit certain investors' ability to purchase or hold our common stock, potentially limiting our ability to enter into or maintain strategic relationships and making our common stock less attractive to investors.
- We are subject to government regulation, including import, export and economic sanctions laws and regulations that may expose us to liability and increase our costs.
- Our sales to government customers subject us to uncertainties regarding fiscal funding approvals, renegotiations or terminations at the discretion of the government, as well as audits and investigations, which could result in litigation, penalties and sanctions including early termination, suspension and debarment.
- Any failure by us to protect our proprietary technologies or maintain the right to use certain technologies may negatively affect our ability to compete.
- If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose certain intellectual property rights.
- Any failure to maintain effective internal controls over our financial reporting could materially and adversely affect us.
- We have identified a material weakness in our internal control over financial reporting that, if not properly remediated, could result in material misstatements in our consolidated financial statements in future periods.
- Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could cause the market price of our common stock to decline significantly, even if our business is doing well.
- We could be subject to certain liquidated damages pursuant to the registration rights agreements we entered into with certain holders of our securities.
- Our principal stockholders and management have substantial control over us and could delay or prevent a change in corporate control.
- Anti-takeover provisions in our charter documents could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.

Note Regarding Forward-Looking Statements

This Report, including the sections titled “Business,” “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” contains express or implied forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. All statements other than statements of historical fact contained in this Report are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may,” “could,” “will,” “would,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “intend,” “predict,” “seek,” “contemplate,” “project,” “continue,” “potential,” “ongoing” or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- our ability to commence and successfully complete the rights offering and asset-based debt financing initiatives as expected, and whether such offering is fully subscribed or such debt financing raises the amounts we hope for;
- our ability to initiate and successfully execute a strategic review of opportunities to enhance stockholder value, or enter into a transaction on acceptable terms, or at all;
- the implementation of our business model and strategic plans for our business, technologies and products;
- our costs in meeting our contractual obligations, including the cash flow impact of operating AFSW, and our ability to maintain our contracts for their expected durations;
- the rate and degree of market acceptance of any of our products or GaN technology in general, including changes due to the impact of (i) new GaN fabrication sources, (ii) the performance of GaN technology, whether perceived or actual, relative to competing semiconductor materials, and (iii) the performance of our products, whether perceived or actual, compared to competing GaN-based, silicon-based and other products;
- the timing and success of product releases by us and our customers;
- our ability to develop new products and technologies;
- our future financial performance, including our expectations regarding our revenue, expenses, ongoing losses, and capital requirements;
- our needs for additional financing, ability to obtain additional funds for our operations and our intended use of any such funds;
- our receipt and timing of any royalties or other payments under any current or future collaboration, license or other agreements or arrangements, including the credit risks of our customers;
- our ability to obtain, maintain, enforce, defend and enhance our intellectual property rights;
- the strength and marketability of our intellectual property portfolio;
- our dependence on current and future collaborators for developing, manufacturing or otherwise bringing our products to market;
- the ability of our third party supply and manufacturing partners to meet our current and future business needs;
- the throughput of our fabrication facilities and third party foundries, as well as the ability of such facilities and foundries to ramp up production;
- our expectations regarding our classification in future periods as a “smaller reporting company,” as defined under the Securities Exchange Act of 1934 (the “Exchange Act”), and an “emerging growth company,” as defined under the JOBS Act;
- the total addressable market and growth rates of the markets in which we compete;
- the competitive landscape of our industry;

- our expectations regarding the performance of our products; and
- the impact of government regulation and developments relating to us, our competitors or our industry.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Report.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Report primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations, and prospects. The outcome of the events described in these forward-looking statements is subject to significant risks, uncertainties, and other factors, including those described in the section titled “Risk Factors” and elsewhere in this Report. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Report. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

Neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. Moreover, the forward-looking statements made in this Report relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Report to reflect events or circumstances after the date of this Report or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make.

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

PART I

Item 1. Business.

Unless otherwise stated or the context otherwise indicates, references to “Transphorm,” the “Company,” “we,” “our,” “us,” or similar terms refer to Transphorm, Inc. and its subsidiaries.

Overview

We are a global semiconductor company founded in 2007. We are a pioneer, and a market and technology leader, in the wide-bandgap GaN power electronics field for high voltage power conversion applications. We deliver high quality and reliable GaN devices with high performance, while providing application design support to a growing customer base. Our GaN devices allow customers to design smaller, lighter and cooler power systems creating increased functional value in end products including smartphone power adapters/fast-chargers, power supplies for datacenter servers/communication, industrial power converters and chargers/converters/inverters for electric vehicles, among other applications. We deploy our unique vertically integrated innovation model that leverages one of the industry’s most experienced GaN engineering teams (with over 300 years of combined experience) at every development stage: device design, materials growth, device fabrication, packaging, circuits and application support. This approach, backed by one of the GaN power industry’s largest intellectual property portfolios with access to over 1,000 world-wide patents, has yielded the industry’s first automotive-grade AEC-Q101 and JEDEC qualified high voltage GaN FETs. Our innovations are designed to move power electronics beyond the limitations of silicon and provide our customers with the potential to achieve higher efficiency (e.g., titanium-class performance in power supplies), higher power density and, in some designs, an overall lower system cost.

Recent Developments

On June 16, 2023, we announced that the independent Financing Committee of our board of directors has approved a rights offering available to all holders of record of our common stock as of 5:00 p.m., Eastern Daylight Time, on June 26, 2023. If the rights offering is fully subscribed, we intend to raise up to \$15 million through the rights offering, to be used for working capital and general corporate purposes. The rights offering will be made through the distribution to all holders of record of common stock as of the record date of non-transferable subscription rights to purchase a fraction of a share of common stock, at a ratio to be determined, for every one right held at a subscription price to be determined prior to the commencement of the rights offering. We intend to commence the rights offering soon after the filing of this Report. We are also pursuing conventional asset-based debt financing initiatives that, if consummated and together with proceeds from a fully subscribed rights offering, are expected to provide us with working capital well into the year ending March 31, 2025.

There can be no assurance that the rights offering will be fully subscribed or that we will be successful in closing the debt financing. If the rights offering is completed but not fully subscribed or the debt financing is not closed, or does not raise the amounts we hope for, our forecasted financial runway will be significantly reduced. If we are unable to secure any additional funding through these financing arrangements, we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to fund our operations into the second half of September 2023. If we do not obtain any other financing, we would need to cease operations, liquidate our assets, and may seek the protection of applicable bankruptcy laws. Because all of our liabilities are senior to our common stock in our capital structure, any such liquidation or bankruptcy would likely result in the complete loss of your investment in our common stock. Therefore, trading in our securities is highly speculative and poses substantial risks. All statements contained herein regarding our future strategy, operations and potential growth are contingent upon our ability to obtain additional financing through the successful execution of the rights offering and debt financing initiatives, or otherwise.

Assuming we are able to raise sufficient funds through the rights offering and debt financing initiatives we are pursuing, we intend to initiate, in our second fiscal quarter ending September 30, 2023, a strategic review of opportunities to enhance stockholder value which may include, among other things, strategic partnerships with third parties with equity or debt investment, a sale of the Company or certain of our assets, strategic licensing, or other

financing alternatives. Our strategic plans are not yet finalized and are subject to market conditions and other uncertainties. There can be no assurance that any strategic review will be successful, that it will result in a transaction on terms acceptable to us or our stockholders, or at all, or will result in increased stockholder value.

Our Technology

Driving “Moore’s law of Power” with GaN: At the core of any power converter or inverter widely utilized in converting electrical energy from one form to another (for example, AC to DC), are semiconductor-based electronic switches, traditionally made with silicon-based devices. While silicon and silicon-based switching transistors like MOSFETs and IGBTs are reaching their technological limits, GaN FETs have significant potential for performance to further the roadmap for power conversion systems that require ever increasing power density (ability to pack power in a small volume), analogous to Moore’s law for digital semiconductors. In this case, the “Moore’s law” analogy is the increasing power density over time, which has been achieved via improvements in switching devices, starting with SCRs, then BJTs, followed by IGBTs and MOSFETs, all of which are silicon-based devices. Relative to silicon-based devices, GaN devices offer advantages including higher switching speeds, higher breakdown voltages and lower resistance. Today, wide-bandgap semiconductors like SiC and GaN are driving the innovation in power electronics.

Our GaN FETs: Our proprietary GaN on silicon material growth (or epiwafer technology) knowhow via MOCVD allows us to build our GaN devices on inexpensive silicon substrates, thereby leveraging the cost structure of well-established silicon-based manufacturing. Our proprietary GaN epiwafer designs also allow us to achieve devices capable of sustaining high voltages well in excess of the 650 Volts required for typical power switching applications, with ultra-low losses. At the core of our GaN FET device is a two-chip, normally-off 650 Volt GaN platform, integrating a low voltage Si FET input/drive stage with a high voltage GaN output stage to deliver a normally-off, packaged power device to the end user. Compared to other approaches by which a normally-off, high voltage GaN switching device can be made, our approach is more robust than other alternatives (so-called junction gated or p-GaN type devices) that typically offer low safety margins. A typical standard Si-MOSFET consists of a normally-off input portion (gate control) with a normally-on output portion (high voltage drift region), that are integrated in one device. We have integrated two separate die in one package in a chip-on-chip configuration to achieve the best of both worlds - high robustness and high performance. The result is a normally-off power device package with a combination of reliability, robustness, design margin and performance. We believe the adoption of this approach by other GaN manufacturers may make our intellectual property even more important going forward. Our GaN FETs stand out in the industry due to their capability to withstand much higher voltages than those required for device ratings (for instance, our standard 650 Volt products have a destructive breakdown voltage in excess of 1,000 Volts, which we believe is high in comparison to the typical range for our competitors’ GaN devices of 650 Volts to 1,000 Volts), contributing to our safety margins in operation.

Continued Innovation: We have a strong innovation track record as evidenced by a series of firsts in the GaN high voltage arena, including the first automotive-grade AEC-Q101 and JEDEC qualified high voltage GaN FETs. We have also released multiple generations of products beginning with Gen-1 and Gen-2 prior to 2016, Gen-3 in 2018, Gen-4 in 2020 and Gen-5 in 2021. Each product platform seeks to improve key industry metrics (or figures of merit) designed to result in both improved performance (lower losses in power converters/inverters for our customers) and lower cost by enabling lower die size and simpler packages.

Epiwafer Products: We also monetize our strong core expertise in GaN epiwafer technology by providing GaN epiwafer products for the RF/microwave/millimeter wave market, as well as for certain strategic customers in the power device market. In 2018 and 2019, we were awarded the base portion and option portion, respectively, of an \$18.5 million contract by the U.S. Navy, which we believe is validation of our technology, intellectual property and capability in this area. We believe this program established us as a U.S.-based supplier for advanced GaN epiwafer products for both the U.S. Department of Defense and commercial applications. In 2021, we were independently awarded a separate and standalone \$1.4 million contract by the Defense Advanced Research Projects Agency (DARPA) – this is an R&D activity that could in the long term develop GaN technology. In May 2023, we were awarded a contract by the National Security Technology Accelerator (“NSTXL”), pursuant to which we may receive up to \$15.2 million over the period from the first quarter of fiscal 2024 through the third quarter of fiscal 2026 for

developing and manufacturing advanced GaN epiwafer materials in accordance with statements of work, and in support of an agreement between NSTXL and the U.S. Government.

Our Solution and Business Model

Our GaN product offerings are based on innovation across the value chain, starting from GaN material and epiwafers to GaN device design, and from wafer fabrication to packaging, as well as application-based reference designs that help our customers extract the most value from GaN. This vertically integrated control of the value chain has resulted in rapid innovation, manufacturing control, and the high quality, high reliability (Q+RTM) brand of high voltage GaN offerings that we offer.

Target Power Market Focus: Our GaN on silicon FET products start with a 650 Volt rating and currently go up to 900 Volts, and we have demonstrated products that will go up to 1,200 Volts. 650 Volt products represent a large portion of the power conversion market because the world-wide line voltage into which these converters have to plug in ranges from 110 Volts to 240 Volts, resulting in in-system voltages of 400 Volts to 500 Volts that necessitate a 650 Volt power device. Similarly, higher bus voltage applications such as those running off an 800 Volt electric vehicle battery for an inverter require higher voltage ratings from power devices. As the voltage requirement gets higher, a silicon-based power device switch becomes increasingly lossy and the differentiation in performance offered by a GaN device increases.

Products: Our products currently address power conversion applications ranging from approximately 30 watts to approximately 30 kilowatts in multi-phase applications. Our GaN FETs are offered in various packages to address our customers' needs. In addition to the appropriate device, a robust and easy-to-use package is key for a power product because the heat dissipated in the device ultimately is removed via the package and then the system heat sink. TO packages have historically served a significant role in the power semiconductor industry. We have designed our GaN products in these TO packages to deliver kilowatt class power that takes advantage of GaN's high efficiency and low loss switching capability along with a solid thermal interface offered by the TO package. We also offer surface mount equivalents of the TO packages such as the D2Pak, where surface mount capability is a requirement. On the other hand, for fast switching compact power adapters (typically sub-300 watt), the compact PQFN package is our standard offering. Our packaged products also incorporate simple but powerful high frequency and high speed switching design philosophies, designed to result in GaN solutions with stable operation at multi kilowatts, at high-speed and high frequency (multi-100 kHz to MHz), all while maintaining high quality and reliability.

Markets: Our GaN products switch much faster than equivalent silicon products and increase a system's power density, producing greater efficiency while enabling system size reduction. With their proven reliability and ability to reduce size and save energy, 650 Volt GaN FETs have now been adopted in the market. GaN provides cost-competitive, easy-to-embed solutions that reduce energy loss and system size by as much as 40 percent, while enabling system cost reduction, to simplify converter and inverter design and manufacturing.

Our products today address power conversion applications including:

- low power applications (approximately 30 watt to 300 watt) such as smartphone power adapters/fast chargers and laptop and appliance power supplies;
- medium power applications (approximately several hundred watts to 3 kilowatts) such as power supplies for gaming, microinverters, appliances, datacenter servers, communications infrastructure, and industrial servo drives for motors and robotics; and
- high power applications (approximately 3 kilowatts to over 5 kilowatts) such as blockchain applications, higher power datacenter servers, uninterruptable power supply/energy applications, onboard chargers, converters and inverters for electric vehicles, and power supplies for industrial applications.

We believe power conversion with high voltage semiconductor devices (e.g., 650 Volt devices) is a large market opportunity. Based on reports from various third party research firms and our internal estimates, we estimate the total addressable market for GaN to be approximately \$3.1 billion in 2023 and \$8.0 billion in 2028.

In addition to the power semiconductor market, we have started supplying GaN epiwafers on various substrates, including silicon carbide, sapphire and silicon, ranging from 4 to 6 inches in diameter, for RF/microwave/millimeter wave device markets, and we believe we are in a position to target the growing 5G RF market in the future. Based on a report from a third-party research firm and our internal estimates, we believe the existing market for GaN RF transistors for wireless infrastructure and 5G exceeds \$800 million, and we believe we can service the approximately 40% of this market that is attributed to epiwafers.

Our History

Overview: Our company was launched in 2007 by founders Professor Umesh Mishra and Dr. Primit Parikh, with more than 30 years of GaN technology and business experience between them at the time, with the goal of commercializing GaN technology for the large power semiconductor market while making a global impact on electrical energy savings and simplifying power conversion for end users. We have been a key player in the area of high voltage GaN power devices from our early days with several industry firsts, including the first GaN on silicon device to the first 600 Volt GaN device JEDEC qualification, the first high voltage GaN automotive qualified product under the stringent AEC-Q101 standard, the first high temperature (175C) rated GaN offering, and the first comprehensive field reliability data, now including over 175 billion hours of operation with a statistical failure rate of <0.1 FIT (0.1 per billion hours of operation).

Blue Chip Partnerships: Throughout our history, we have established blue chip partnerships with strong investors, manufacturing and channel partners, key customers, and strategic investors and partners. For the year ended March 31, 2023, Nexperia B.V. (“Nexperia”), GaNext, and GaNovation each accounted for more than ten percent of our revenues and, together, these customers accounted for 62.9% of our revenues. For the year ended March 31, 2022, Nexperia, the U.S. government and GaNext each accounted for more than ten percent of our revenues and, together, these customers accounted for 78.1% of our revenues.

In 2014, we established a business integration, IP acquisition/licensing and channel partnership agreement with Fujitsu Limited (“Fujitsu”) and Fujitsu Semiconductor Limited (“FSL”), pursuant to which we established Transphorm Japan, Inc. (“Transphorm Japan”) as a wholly owned subsidiary, with a leading manufacturing and quality team from FSL. In connection with this agreement, we entered into a manufacturing partnership for AFSW, FSL’s high quality 6-inch silicon wafer fabrication plant in Aizu Wakamatsu, Japan, which allowed us to bring silicon-like manufacturing excellence to GaN products. We also acquired a patent portfolio from FSL and a license to a separate portfolio from Fujitsu. This relationship further led to the establishment in 2017 of a joint venture with FSL for AFSW, in which we were a noncontrolling partner with a 49% interest until our joint venture with FSL terminated on July 31, 2021.

In December 2020, we entered into a joint venture agreement with JCP Capital Management, LLC Limited (“JCP Capital”), the controlling party with a 75% ownership in the joint venture as of March 31, 2023, to create GaNovation PTE Ltd. (“GaNovation”), a joint venture company in Singapore, to engage in the business of distribution, development and supply of GaN products and any business relating to the businesses of AFSW. In connection with the establishment of GaNovation, we appointed GaNovation (including one of its affiliates) as our exclusive distributor in Greater China, with rights to procure processed GaN wafers and other components from us, rebrand and resell packaged products purchased from us, and customize and develop mutually-agreed-upon products. In August 2021, GaNovation acquired all of our and FSL’s interests in AFSW, which terminated our joint venture with FSL. From August 2021 to April 9, 2023, we held a 25% interest in GaNovation. Pursuant to the joint venture agreement, our interest in GaNovation increased to 32.5%, effective April 10, 2023. Accordingly, we are now responsible for 32.5% of the funding obligations and losses of AFSW through our ownership interest in GaNovation, subject to a maximum of \$12.0 million for the three-year period beginning August 1, 2021. As of March 31, 2023, we had provided \$5.3 million of this \$12.0 million commitment to GaNovation. For the years ended March 31, 2023 and 2022, GaNovation’s primary business activity related to the businesses of AFSW. If AFSW continues to operate at a loss (which we currently expect to continue to be the case for the next couple of

years), our cash flows will continue to be negatively impacted. We may seek to add other partners in AFSW to both reduce the impact on our cash flows and help AFSW achieve break-even.

In 2015, KKR Phorm Investors L.P. (“Phorm”), an affiliate of Kohlberg Kravis Roberts & Co. L.P., made an investment of \$70 million in us with the goal of enabling us to get our GaN products that had completed concept, engineering, manufacturing, reliability and quality testing to mass market. As of the filing of this Report, Phorm remains our largest stockholder.

In 2017, we entered into a partnership with Yaskawa Electric Corporation of Japan (“Yaskawa”), a global leader in motion control and a pioneer in the adoption of new semiconductor technology for the field of servo motors, robotics and renewables. In October 2017, Yaskawa loaned us \$15.0 million pursuant to a convertible promissory note, and in October 2021, Yaskawa converted the note into 3,120,000 shares of our common stock. Yaskawa seeks to enable smaller, faster and more efficient power electronics servo drives in applications such as robotics, which use servo motors to enable movement along various axes of motion in a robot, to improve robot functions.

In December 2020, we entered into a cooperation and development agreement with Yaskawa, pursuant to which Yaskawa agreed to provide \$4.0 million over approximately three years to fund development activities related to industrial power conversion applications, with an initial focus on servo motor drive applications. The cooperation and development agreement was subsequently amended to provide for two separate commitments of \$2.5 million and \$1.5 million, respectively. As of March 31, 2023, Yaskawa has provided \$3.3 million of these commitments.

In 2018, we established a five-year multi-element cooperation agreement with Nexperia, a leader in silicon-based power semiconductors for automotive products, with the goal of establishing a second source of our GaN products and better positioning to penetrate the automotive market with our GaN products in the long term. Through a combination of equity ownership, a loan agreement, technology development projects, and licensing of our wafer-fabrication process and certain products, we secured significant funding from Nexperia. We believe this agreement is indicative of our strong intellectual property portfolio as well as our ability to create revenue streams by monetizing our intellectual property. In May 2021, we amended the cooperation agreement with a view towards a longer term supply relationship with Nexperia. See the section titled “—Nexperia Cooperation Agreement” below.

In 2020, we established a relationship with Marelli, a leading automotive Tier-1 supplier (headquartered in Japan and with a world-wide footprint) for long term development of our automotive converter and inverter products.

In 2021, we established a partnership with Global Wafers Corporation (a world-wide leader and top 3 supplier of silicon substrates for the semiconductor industry), for rapid and efficient scaling of our epiwafer capacity, with intellectual property being controlled by Transphorm. This will establish a 3rd location for our epiwafer manufacturing, after our two existing locations in Goleta-CA and Aizu-Japan that we own.

Customer Partnerships: Beginning in 2018, we have empowered our customers’ success and have seen numerous customers introduce their end power conversion products such as power supplies, battery chargers and fast charging adapters into the market. For example, Corsair, a leading supplier of high-performance gaming equipment, successfully introduced its AX1600i series of GaN-based power supplies. As mentioned above, Yaskawa has partnered with us with a view of enabling GaN devices for servo drives in robotics applications. We have also developed partnerships with companies based in both Asia and the United States for GaN-based adapter products. Recently we announced our partnership with Boco Electronics, which uses our GaN FETs for higher power blockchain computing power supplies. We also announced partnerships with Weltrend Inc., a global leader in adapter USB Power Delivery (PD) Controller Integrated Circuits (ICs) released an integrated GaN System-in-Package (SiP) for 65W fast charging applications, in collaboration with Transphorm, utilizing our high performance-high reliability GaN chips. Lastly, in 2018 and 2019, the U.S. Navy awarded us the base portion and option portion, respectively, of an \$18.5 million three-year contract to create a U.S.-based source of advanced GaN epiwafer materials for the U.S. Department of Defense, which we believe exemplifies the recognition of our strong GaN MOCVD epiwafer platform, intellectual property and manufacturing scale and creates an opportunity for us to sell into the broader GaN RF epiwafer market. This has helped us in developing a second vertical - our GaN epiwafer business - to supplement our primary business of GaN power products. In this area, we have started to sell

epiwafer, targeting both customers within the U.S. Department of Defense (including those resulting from the impact of the U.S. Navy program as well as others) and commercial RF and power device customers.

We are dependent on revenues from certain key customers such as GaNovation (our Greater China Distributor), GaNext (Zhuhai) Technology Co., Ltd. (“GaNext”), Nexperia, and the U.S. government, as well as on revenues from sales of our epiwafer products to various customers engaged in research and development for the U.S. Department of Defense utilizing our GaN epiwafer products.

Commercialization

Current GaN Power Products: We have qualified and released to manufacturing a number of products based on our 650 Volt GaN FET technology. Our current product portfolio in the market is based on our 650 Volt Gen-1 to Gen-5 GaN FET platforms. Our products are offered in the industry standard TO packages (TO247 and TO220, and now sampling TOLL surface mount packages) or the 8x8 PQFN surface mount packages, with our performance packages and industry pin-to-pin compatible packages. The TO packages offer the most robust thermal performance and result in higher power per device, ranging from 1 kilowatt to over 5 kilowatt, and the PQFN packages offer the most compact and higher speed switching performance, typically for sub 2-kilowatt applications, including adapter applications. We also have a 900 Volt GaN FET product in the market and believe that we are the only company to have qualified a 900 Volt GaN device to date. The key markets that are currently addressed by our products include:

- Consumer: Power adapters and fast chargers and gaming power supplies
- Computing: Data center, infrastructure power supplies, crypto mining and blockchain computing applications
- Industrial and energy: power supplies, micro-inverters, uninterruptable power supply/battery chargers, servo drives

Additionally, we target to enter the automotive products market in the mid-term, via DC-DC converters, on board chargers, and AC inverters for off-grid power, for which we are actively working with customers, including companies that sell 2-wheel, 3-wheel and 4-wheel vehicles, and in the longer term, via EV power-train and high speed chargers after our development of larger current, higher power GaN devices.

Application Resources: We develop reference designs and evaluation boards that help our customers incorporate our GaN devices into the design of their power conversion products. We also make our applications kits available on distribution sites such as Digikey and Mouser.

Gen-4 Products: Our Gen-4 platform further improves the industry metric of resistance per unit die area and enables simpler packaging. A summary of our released Gen-4 products is below:

- 650 Volt/Gen-4/480 mohm class GaN FET for 24 watt to 50 watt class adapters;
- 650 Volt/Gen-4/240 mohm class GaN FET for 45 watt to 100 watt class adapters;
- 650 Volt/Gen-4/150 mohm class GaN FET for 100 watt to 500+ watt class adapters and power supplies;
- 650 Volt/Gen-4/70 mohm class GaN FET for 300 watt to 1500 watt class adapters, power supplies, microinverters and other mid-high power applications;
- 650 Volt/Gen-4/50 mohm class GaN FET for 1500 watt to 2500 watt class power supplies, inverters, and other high power applications, and

- 650 Volt/Gen-4/35 mohm class GaN FET for kilowatt class general power conversion applications including data-centers, blockchain computing, industrial and automotive electric vehicle converters and chargers.

We have successfully commercialized Gen-4 products in 30 watt to 150 watt adapters and have the capability to provide reference design-based solutions for these power adapters. We have also successfully commercialized Gen-5 15 mohm products to be used for industrial applications and in EV applications. Our continued relationship with multiple design partners, as well as the expansion of our own application engineering team, is important for our success in the adapter market. Further, the success of our design-in with end customers is critical to us continuing to grow adapter revenues.

Higher Voltage, 900 Volt FETs: We believe we are the only company to have qualified 900 Volt GaN FETs. These products are used for power conversion applications that involve higher in-circuit voltages in excess of 600 Volts to 700 Volts or applications that run off a higher voltage battery. We released our Gen-3 JEDEC qualified commercial 900 Volt product in August 2020.

Automotive Products and Partners: Our GaN products are capable of being qualified for automotive applications following the AEC-Q101 standard. We have already AEC-Q101-qualified our Gen-2, Gen-3 and Gen-4 based products. Our revenues from automotive applications are dependent on our activities with certain Japanese automotive partners, including Marelli, as well as our non-contractual relationship with Nexperia, which plans to offer their automotive products both through licensing our technology and relying, in part, on us for epiwafer procurement. With the completion of the exclusivity arrangement with Nexperia in the 4-wheeler Automotive/EV space, we plan to broadly target design-ins with automotive customers, starting with on-board-chargers and DC-DC converters. Success with Japanese automotive partners and Nexperia's automotive outreach would influence both the timing and ramp-up of our automotive revenues.

Epiwafer Business: We view our epiwafer business as a vertical that supplements our primary GaN power device business. In 2018 and 2019, we secured the base portion and option portion, respectively, of an \$18.5 million three-year contract from the U.S. Navy for commercialization of GaN-based epiwafers on various substrates including silicon carbide, silicon and sapphire. We began generating revenues from the sale of GaN epiwafers for the RF GaN market to the U.S. Department of Defense in 2020. We believe this contract, which expired in December 2022, provided a strong base for our epiwafer business.

Further on May 17, 2023, we entered into a Performer Agreement with NSTXL, pursuant to which we agreed to develop and manufacture advanced GaN epiwafer materials in accordance with statements of work, and in support of an agreement between NSTXL and the U.S. Government. This agreement has an initial expiration date of December 9, 2024, which may be extended in the event the U.S. Government exercises its option to provide future funding commitments to us.

In addition to sales to government customers, we are targeting commercial GaN-based epiwafer sales for the RF GaN market.

Research and Development (“R&D”)

Our innovation is targeted at maintaining a leadership position in the GaN power device market. We completed development and commercial qualification of our first Gen-5 products and will continue to develop more products based on customer needs. Further, we have also started working on our next improvement in figure of merit (a quality of semiconductor devices impacting performance limits) through our next-generation-based platform.

We have also developed 1,200 Volt GaN devices, partly funded by a research sub-contract from the U.S. Department of Energy ARPA-E (Advanced Research Project Agency-Energy) agency, and recently demonstrated performance of this technology. The research sub-contract ended on May 31, 2022, after which we continue to develop 1,200 Volt GaN with internal funding at this time.

Intellectual Property

Proprietary Protection: Our commercial success depends in part on our ability to continuously obtain and maintain proprietary protection for our GaN products, associated solutions and other know-how, to operate without infringing the proprietary rights of others, and to prevent others from infringing on our proprietary rights. We have been building and are continuing to build our intellectual property portfolio relating to our GaN products, including GaN products that can be used in the power conversion industry. Our policy is to seek to protect our proprietary position by, among other methods, filing and licensing U.S. and certain foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how, and technological innovation to develop and maintain our proprietary position. We cannot be sure that patents will be granted with respect to any of our owned or licensed pending patent applications or with respect to any patent applications filed or licensed by us in the future, nor can we be sure that any of our existing owned or licensed patents or any patents that may be granted or licensed to us in the future will be commercially useful in protecting our technology.

IP Leadership: We are a world leader in GaN power semiconductor based intellectual property, with a patent portfolio that has access to over 1,000 patents comprising our directly owned patents, exclusive, sole or nonexclusive licenses of key portfolios from The University of California, Santa Barbara (“UCSB”), Furukawa Electric Co., Ltd. (“Furukawa”) and Fujitsu, as well as a nonexclusive license from Cree, Inc. (“Cree”) for the field of GaN power devices. The strength of our portfolio lies in the fact that our intellectual property covers all aspects of the GaN value chain, ranging from GaN epitaxial materials to device design to wafer fabrication processes to packages as well as GaN-based circuits and applications.

Portfolio: Our patent portfolio includes pending patent applications and issued patents in the United States and in foreign countries. As of March 31, 2023, our owned and licensed patent portfolio consisted of over 850 issued patents and over 200 pending patent applications around the world. Our over 358 directly owned patents are complemented by 95 patents from Furukawa’s sole licensed intellectual property and 172 patents from Fujitsu’s nonexclusively licensed intellectual property in the power semiconductor area. The 16 patents exclusively licensed from UCSB include unique intellectual property on nitrogen polar GaN, which was pivotal to us being awarded the contract from the U.S. Navy. Additionally, we hold a nonexclusive license from Cree to 420 GaN material/device patents. Our licenses for the UCSB, Furukawa and Cree patents are royalty-bearing, and we pay royalties based on total revenues. The license for the Fujitsu patents is not royalty-bearing. We have also sub-licensed the UCSB and Furukawa patents to Nexperia on a royalty-bearing basis, which helps us defray the cost of maintaining these intellectual property portfolios.

Patent life determination depends on the date of filing of the application and other factors under the patent laws. In most countries, including the United States, the patent term is generally 20 years from the earliest claimed filing date of a non-provisional patent application in the applicable country.

UCSB license agreement

We entered into a patent rights license agreement with UCSB in 2007. The UCSB license agreement requires us to use commercially reasonable efforts, consistent with demand in the marketplace and industry conditions and development timelines, to research, develop, market and manufacture products that are licensed under the agreement. We have the right to sublicense these rights to third parties. The UCSB license is subject to the rights of the U.S. government under any and all applicable laws including substantially manufacturing all licensed products in the United States, unless such requirement is waived by the U.S. government. In addition, we have the obligation to pay UCSB’s patent prosecution and maintenance costs, as well as royalties at a low single-digit percentage of any net revenue generated by our sale of any licensed product. In the event we grant a sublicense under the licensed patent rights, we also have the obligation to pay UCSB a certain portion of the sublicense royalties equal to at least as much as would have been due from us to UCSB under the parent license. We may terminate this license agreement at any time by providing 90 days’ written notice to UCSB. UCSB may terminate this license agreement if UCSB notifies us that we are in default under the agreement, and we do not cure our default within 90 days of such notice.

Furukawa license agreement

We entered into a patent license agreement with Furukawa in 2014. We have the right to sublicense these rights to third parties. We share in the maintenance costs for the licensed patents by paying a fixed annual maintenance fee of \$200,000, as well as royalties at a low single-digit percentage of any net revenue generated by our sale of any licensed product. In the event we grant a sublicense under the licensed patent rights, we also have the obligation to pay Furukawa a certain portion of the sublicense royalties. We have one sublicense in place for which we receive a certain portion of our maintenance fees and certain royalties, which will be passed on to Furukawa. Either party may terminate or renew this license agreement after ten years from entry into the agreement.

Fujitsu license agreement

We entered into a patent license agreement with Fujitsu in 2013. We do not have the right to sublicense the applicable patent rights to third parties. Under the terms of this license agreement, Fujitsu has no obligation to sue or enforce the patent rights against third party infringers. Our license from Fujitsu is fully paid up and royalty free worldwide, with nonexclusive rights for power electronics. This agreement is non-terminable.

Cree license agreement

We entered into a patent license agreement with Cree in 2013. We do not have the right to sublicense the applicable patent rights to third parties. Under the terms of this license agreement, Cree has no obligation to sue or enforce the patent rights against third party infringers. We have the obligation to pay royalties at a low single-digit percentage of any net revenue generated by our sale of any licensed product. Either party may terminate or review this license agreement every three years.

Our Technology Licenses and Assignments

Our strategy for the protection of our proprietary technology is to seek multi-jurisdictional patent protection with a focus on jurisdictions that represent significant global power semiconductor markets. However, we assess on a case-by-case basis whether it is strategically more favorable to maintain trade secret protection for our inventions and “know-how” rather than pursue patent protection. Generally, patents have a term of twenty years from the earliest priority date, assuming that all maintenance fees are paid, no portion of the patent has been terminally disclaimed and the patent has not been invalidated. In certain jurisdictions, and in certain circumstances, patent terms can be extended or shortened.

Although our current GaN products are based on the 2-chip, normally-off configuration, our intellectual property also includes patents on multiple approaches for the 1-chip, normally-off or the e-mode GaN device technology, including patents on the so called “p type” gated GaN device approaches.

As the GaN power semiconductor business grows, we expect to be able to continue to capitalize on our intellectual property.

Trademarks and Trade Secrets: Trademarks form an important part of branding our products, the philosophy behind those products and the Company itself. Some of our key trademarks are the Transphorm logo (with the globe), Q+R (our Quality and Reliability brand) and SuperGaN (our highest performance new generation of GaN products). We also rely on trade-secret protection for our confidential and proprietary information, and we typically use non-disclosure agreements when commencing a relationship with a customer or partner, particularly when we believe we will share proprietary information. We have an internal program to document our trade-secrets for each major area of our technology and operations. We cannot be sure that we can meaningfully protect our trade secrets on a continuing basis. Others may independently develop substantially equivalent confidential and proprietary information or otherwise gain access to our trade secrets.

Licensing to Nexperia: As part of our long-term cooperation agreement with Nexperia and in exchange for Nexperia’s original investment in us, we agreed to transfer certain technologies to Nexperia and have provided Nexperia with licenses to manufacture and sell products using such technologies (in each case, excluding our epi process technology). Through April 3, 2023, Nexperia had (i) an exclusive license (i.e., exclusive of us) for the automotive field in all regions except Japan, with the exception that we may develop, manufacture or directly sell any products in the automotive field to certain specified customers anywhere in the world (including Japan), and (ii) a “sole” license for all other areas of application (i.e., we could not grant similar licenses to any other parties but we were not restricted from using or exploiting our technology in such other areas of application). Beginning April 4, 2023, these licenses became nonexclusive. These licenses were initially contingent upon Nexperia fulfilling the appropriate licensing payment requirements, which in turn was contingent upon the execution of certain milestones by us. As of March 31, 2023, the licenses had been secured by Nexperia upon payment of the applicable licensing consideration by Nexperia and execution of now-completed milestones by us.

Competition

Overview: Our solutions compete with other power semiconductor solutions for power conversion including other GaN products, SiC products and silicon super-junction and IGBT products. Both GaN and SiC belong to the wide-bandgap semiconductor materials category, which offer high power switching performance due to their inherent capability to switch with lower losses at high voltages. Our GaN products are targeted at the 600 Volt to 650 Volt and the 900 Volt markets today, addressing power levels from 30 watts to over 30 kilowatts.

Competition in our markets is based on a variety of factors, including cost, size, power consumption, performance, reliability, product line depth and breadth, and ability to supply in sufficient quantities. We believe we can, or will be able to, compete effectively based on these factors.

Our GaN solutions compete with silicon-based products from companies such as Infineon, ST Microelectronics, Toshiba, ON Semiconductor and others, as well as with SiC based offerings from Rohm, Infineon, Wolfspeed, and others. SiC devices benefit from the fact that they are vertical devices while today’s high performance GaN devices are lateral devices. Vertical devices tend to offer smaller total chip area for similarly rated devices. However, GaN devices can make up for this size difference, at least in part, by being manufactured on a very low cost silicon substrate. We also compete with other high-voltage GaN product providers including Power Integrations, Infineon, Panasonic, GaN Systems, Navitas, Texas Instruments, Innoscience and others.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as greater name recognition, longer operating histories, broader and deeper product portfolios, larger customer bases, substantially greater financial and other resources, and larger scale manufacturing operations. Our current financial situation makes it more difficult for us to compete as certain customers and partners may question whether we will be able to continue our operations. However, we believe our products have the potential to compete, and do compete, with many of our competitors’ offerings through product quality, product reliability and satisfaction of customer qualifications and standards.

Some companies as well as academic institutions are engaged in research and development of vertical GaN devices fabricated on bulk GaN substrates. While these could be promising in the future, much remains to be proven as to the ultimate quality and cost of these GaN substrates as well as the actual performance benefit of a vertical GaN device on a GaN substrate vs. high performance GaN HEMT-based products made on silicon substrates.

Competition With Silicon: We aim to capture applications that are traditionally addressed by silicon but for which silicon no longer offers sufficient performance. However, although the overall system cost may be lower with GaN due to compact size and reduction of other components in the system, the cost of certain GaN devices is higher than the cost of the comparable silicon devices at present (approximately twice the cost as such silicon devices). Therefore, in applications where silicon performance is acceptable, it may be difficult to compete with GaN products until the cost of the GaN devices is reasonably close to comparable silicon devices at a per device level. Typically, GaN devices face competition from silicon superjunction devices or silicon IGBT devices in such scenarios.

Competition With Silicon Carbide: Although SiC products have been around for a much longer time than GaN devices, we believe that GaN has better figures of merit with respect to certain power switching applications and the potential to deliver lower losses for such power switching applications. GaN is also made on standard silicon wafer substrates, lending it the cost structure of silicon-based wafer fabrication versus the more expensive SiC substrates on which SiC devices are manufactured. However, although the performance of SiC devices today at 600 Volts to 650 Volts is distinctly lower than GaN, SiC devices are more competitive at higher voltages such as 1,200 Volt nodes, where SiC is currently growing in use. This is due, at least in part, to SiC devices such as MOSFETs typically having a low mobility of electron charge under the gate region (such as approximately 50 cm²/Volt-second), versus GaN HEMTs which have much higher electron mobility in the gate region as well as the total conducting (or drift) region. For example, our GaN HEMTs have typical channel mobility of approximately 2,000 cm²/Volt-second. The lower gate mobility of the SiC MOSFET results in higher resistance (and thus higher loss) under the gate region. At lower voltages, the overall conduction (or drift) region is smaller and the gate region represents a higher portion of the total device. At higher voltages, such as 1,200 Volts, the gate region represents a smaller portion of the overall device and thus is not too detrimental for overall device loss. Thus, as the voltage requirement of a device is lowered, SiC devices generally tend to fall in relative performance versus GaN devices.

Competition With Other GaN Offerings: Finally, our GaN devices compete with offerings from other GaN manufacturers. While the presence of multiple GaN manufacturers is required for the overall acceptance of GaN technology, we strive to differentiate ourselves through quality, reliability, and easy to use GaN devices in thermally robust packages, while still offering a high level of performance (low loss and high efficiency) at reasonable price points.

Our Growth Strategy

Our growth strategies include (i) addressing growth in the power conversion markets through innovative GaN products with high quality and reliability that are easy to use, (ii) establishing an aggressive product and technology roadmap to improve product performance and decrease our costs, (iii) maintaining strong partnerships in what we believe are important product areas, and (iv) maintaining strong connections with suppliers, manufacturing partners, solutions partners and distribution partners.

In the near term, we aim to continue to incorporate our products into power supplies by supporting product opportunities ranging from sub-100 watt compact smartphone fast-charging adapters to over 3 kilowatt power supplies for datacenter servers and blockchain applications with our GaN products. We continue to develop reference designs for various adapter solutions such as 65 watt to over 200 watt USB Type-C and other related fast chargers to provide customers a complete solution with our easy-to-use, high reliability GaN products. Adapters for fast chargers, which are prevalent with the increased power consumption of 5G mobile phones, represents a strong opportunity to market our GaN solutions. We have established several partnerships with leading IC companies who work with us to develop reference designs and solutions with their controller/driver/other ICs and Transphorm GaN. We aim to continue our partnerships with customers who have already introduced high-efficiency, compact, GaN-based power supplies in the market recently and to expand with more customers in this area.

In addition, we are addressing industrial markets such as industrial power supplies, servo motor drives for robotics, microinverters, uninterruptible power supplies, and inverters and chargers for off-grid and backup power solutions, among other products. Our products come in standard packages that are thermally robust and capable of efficiently delivering 300 watts to 5 kilowatts of power in a single package, which we believe are well suited for these types of products. We also develop reference designs for the applicable subsystems of power converters and inverters to ease product integration and help our customers derive additional benefit with GaN solutions. We have developed significant partnerships in this area, such as with Yaskawa in the area of servo motor drives.

We believe that power conversion opportunities on board the automobile, such as on board battery charger and DC-DC converters for powering auxiliary systems, as well as the powertrain inverters, represent an attractive market opportunity for GaN solutions. GaN-based devices can provide improvements in efficiency over traditional silicon devices, enabling compact systems for efficient charging and ultimately enabling higher driving range. In the near term, our focus will be on two and three-wheeled vehicles with lower power ratings (e.g., 800 kilowatts). In the mid

term, our focus will be having customers design around our products in the areas of DC-DC converters (e.g., 3 kilowatt power) and onboard chargers (e.g., 3.3 kilowatt to 11 kilowatt power); we currently have products available to address these product areas. In the long term, we aim to address powertrain inverters with higher power ratings (e.g., 50 kilowatts to over 200 kilowatts) using innovative solutions such as combining multiple GaN devices and developing devices rated for higher power output. For example, we believe we are the only company to date to qualify and release a 900 Volt-rated GaN power device. We also have 1200 Volt rated devices at a demonstration stage.

We intend to continue to innovate in the GaN technology space to maintain our reputation in product quality, reliability and performance and to continue to improve the costs of our GaN products over time. We plan to offer these products in both robust, industry-standard packages as well as compact, surface-mount packages based on the power level and customer requirements.

As a result of our prior contract with the U.S. Navy, we are also positioning ourselves to be a supplier for high quality GaN epiwafers on various substrates such as silicon, silicon carbide and sapphire, in wafer diameters ranging from 4-inch and 6-inch now to 8-inch in the next few years. We aim to become a strong U.S.-based epiwafer supplier for GaN RF electronics for both the U.S. Department of Defense and commercial RF applications such as GaN RF transistors for wireless infrastructure and 5G. For these areas, we also have the advantage of being a pure-play epiwafer foundry as we do not make RF device products. We will also target providing GaN epiwafers for power semiconductor applications to select strategic partners and for select development opportunities.

Government Regulation and Product Approval

Our primary set of products that include GaN power semiconductor FETs fall into the ECCN EAR-99 category of the export regulations from the U.S. Department of Commerce and as such are not currently subject to restrictions. We are required to conform to other guidelines and restrictions of the Department of Commerce and other government regulations that may be in place from time to time concerning shipping products to specific companies or countries. Our GaN epiwafers are classified under the ECCN 3C001 (GaN on silicon) and ECCN 3C006 (GaN on silicon carbide) category of export regulations, while our GaN on silicon epiwafer production and development technology falls under ECCN 3E001 of the regulations, and may require a license for export, re-export or transfer to a number of countries pursuant to EAR. We have systems in place to ensure our compliance with these guidelines and procedures and U.S. laws and regulations. Any exports of our technology for development or production of our epiwafers (under ECCN 3E001) to our own subsidiary in Japan and to AFSW, which is wholly owned by our joint venture GaNovation, is under the license exception TSR (technology and software under restriction).

To the extent our products are or become subject to U.S. export controls and regulations, these regulations may limit the export of our products and technology, and provision of our services outside of the United States, or may require export authorizations, including by license, a license exception, or other appropriate government authorizations and conditions, including annual or semi-annual reporting. Export control and economic sanctions laws may also include prohibitions on the sale or supply of certain of our products to embargoed or sanctioned countries, regions, governments, persons, and entities. In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, and importation of our products and technology and the provision of services, including by our partners, must comply with these laws or else we may be adversely affected, through reputational harm, government investigations, penalties, and a denial or curtailment of our ability to export our products and technology. Complying with export control and sanctions laws may be time-consuming and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products and technology from being provided in violation of such laws, our products and technology may have previously been, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us and for the individuals working for us. Export or import laws or sanctions policies are subject to rapid change and have been the subject of recent U.S. and non-U.S. government actions. Changes in export or import laws or sanctions policies, may adversely impact our operations, delay the introduction and sale of our products in international markets, or, in some cases, prevent the export or import of our products and technology to certain countries, regions, governments,

persons, or entities altogether, which could adversely affect our business, financial condition and results of operations.

Our subsidiaries in Japan, Transphorm Japan and TJE, also adhere to export control regulations under Japanese law, which generally mirror U.S. export control laws. Transphorm Japan and TJE have obtained licenses for the export of epiwafer materials to the extent required.

We are also generally subject to other industry and environmental regulations for electronic and semiconductor products such as the Restriction of Hazardous Substances Directive 2002/95/EC.

Manufacturing and Supply

Supply Chain and Epi Materials: We believe we have strong manufacturing and supply chain operations in comparison to our competitors, from GaN epiwafers to wafer fabrication to packaging and testing. We control our core MOCVD GaN epiwafer manufacturing and development, with multiple MOCVD reactors at both our Goleta, California headquarters and our joint venture wafer fab in Aizu Wakamatsu, Japan. Each location has multiple 6-inch production scale reactors, including some with 8-inch capability that we may require in the future. We believe these reactors, with the ability to grow high quality, high uniformity GaN epi materials on silicon, silicon carbide and sapphire substrates, provide sufficient capacity for epitaxial wafers both for our GaN power device business as well as our epiwafer sales vertical.

Wafer Fabrication and Joint Venture: Our wafer manufacturing as well as most of our engineering development is accomplished in our joint venture wafer fab in Aizu Wakamatsu, Japan. AFSW has a fully depreciated 6-inch production fabrication facility, originally running silicon CMOS and bipolar processes and, since 2012, also running GaN processes while continuing some silicon-based wafer foundry activity. In November 2013, we entered into a process technology and development and services agreement with FSL to integrate our GaN power device manufacturing processes with FSL's manufacturing processes to enable our GaN wafer manufacturing at what is now the AFSW fabrication facility. Since that time, we have gained full access to the facility for development and manufacturing of various generations of our GaN products. For example, we worked with FSL to qualify a complete manufacturing process for GaN wafers in the AFSW fabrication facility, which resulted in our products being commercially released in 2015 under our Gen-2 platform. Subsequently all our production supply of fabrication wafers has been sourced from the AFSW fabrication facility.

In 2017, we entered into a joint venture agreement with FSL to gain further control of our GaN manufacturing, share ownership and operating costs of the AFSW entity, and refine certain other aspects of our commercial relationship. Originally, we held a 49% interest, and FSL held a 51% interest, in this joint venture. On April 1, 2020, FSL exercised its put option under the joint venture agreement and notified us that FSL intended to exit the joint venture by selling its 51% interest in AFSW to us. In December 2020, we created GaNovation with JCP Capital, the controlling party with a 75% ownership interest in GaNovation as of March 31, 2023, to become a partner in AFSW. In August 2021, GaNovation acquired all of our and FSL's interests in AFSW. From August 2021 to April 9, 2023, we held a 25% interest in GaNovation. Pursuant to our joint venture agreement with JCP Capital, our interest in GaNovation increased to 32.5%, effective April 10, 2023. Accordingly, we are now responsible for 32.5% of the funding obligations and losses of AFSW through our ownership interest in GaNovation, subject to a maximum of \$12.0 million for the three-year period beginning August 1, 2021. As of March 31, 2023, we had provided \$5.3 million of this \$12.0 million commitment to GaNovation. For the years ended March 31, 2023 and 2022, GaNovation's primary business activity related to the businesses of AFSW. If AFSW continues to operate at a loss (which we currently expect to continue to be the case for the next couple of years), our cash flows will continue to be negatively impacted. We may seek to add other partners in AFSW to both reduce the impact on our cash flows and help AFSW achieve break-even.

The AFSW facility, which has a capacity of 14,000 CMOS process equivalent wafers per month, is capable of producing sufficient GaN wafers for our needs in 2023. We believe the AFSW facility can be scaled on demand in the mid-term, and is scalable to address our demand in the long-term over 5 years with increased investment in various standard semiconductor wafer fab equipment, typically acquired from used markets.

Backside Wafer Processing, Packaging and Testing: We contract with two third-party vendors to perform standard functions of back-side grinding and metallization in external facilities in Asia to complete the full wafer process. After these processes, the finished GaN wafers are transported to one of our packaging sub-contracting partners depending on the type of final package, where they are diced and finished into the final product. We have multiple sites in production for our PQFN, TO247 and TO220 packages and at present one site in production for our TO247, TO220 and D2Pak package. The final test portion of the supply chain is also in Asia, in many cases residing within our packaging sub-contractors.

Production Control: Our production planning and control process is centralized from our headquarters and integrated with our enterprise resource planning tools including NetSuite and manufacturing execution systems including WIPtrac. The entire process from forecasting and planning to order entry, then to build execution and inventory management, and finally to shipping, resides in the production control function.

Sales

We currently generate revenue from (i) commercial product sales and service contracts, (ii) government contracts for research and development and (iii) licensing contracts. Products are sold to distributors and end-users in various sectors such as the gaming, industrial, IT, and consumer products industries.

GaN Products - Sales Process and Distributors: Our sales activity is primarily carried out in five broad based geographical regions (with significant focus in Asia) including key focus areas of (i) Mainland China, Hong Kong and Taiwan, (ii) the United States, (iii) Japan and, to a lesser extent, (iv) South Korea and Europe, and (v) India. We have offices in Hong Kong, China, Taiwan, Japan and the United States that include both sales and application engineering/customer support personnel. The field sales and applications effort is also supported by our senior factory applications engineering team from our California headquarters.

We partner with several regional distributors and sales representatives. In Asia, Avnet, Fujitsu Electronics (now part of Kaga Electronics), Common Power, Sino-American Silicon Products, Inc. and GaNovation are our current distributors, with GaNovation as the exclusive primary distributor for new accounts. In Japan, OSE, Kaga-FEI and Asahi Tech are our current distributors. In North America, Fujitsu Electronics is our current distributor, and in Europe, we have partnered with Hyline. Additionally, our products are available worldwide through Digikey and Mouser. We employ multiple regional representatives, primarily in the United States, on an as-needed basis. We also work with select design and development partners who make reference designs and system level solutions with our GaN products and are a part of our extended applications-oriented effort.

Markets and Design Cycles: While our product and service revenue increased for the year ended March 31, 2023 as compared to the year ended March 31, 2022, our total revenue decreased to \$16.5 million for the year ended March 31, 2023 from \$24.1 million for the year ended March 31, 2022, due primarily to a decrease of \$8.0 million in licensing revenue. For the years ended March 31, 2023 and 2022, our product and service revenue of approximately \$14.9 million and \$12.2 million, respectively, was comprised of sales into gaming power supplies, data center power supplies and infrastructure, power adapters, miscellaneous industrial applications and sampling revenue to automotive customers, including through our licensee Nexperia, and epiwafer sales. We currently expect revenue from product sales will increase in fiscal 2024, as compared to the year ended March 31, 2023.

Design cycles for our products can be long and range from 6 to 18 months for the adapter/consumer market to 18 to 30 months for the datacenter and communication infrastructure market as well as industrial markets, to 3 to 5 years for the automotive market. Our sales funnel also classifies various opportunities in stages in the lifecycle at our customers including the stages of investigation, evaluation, dedicated board design, design-in, prototype and pilot production, before commencing full production.

Epiwafer Sales: Epiwafer sales are to U.S. Department of Defense customers for GaN on 4-inch and 6-inch wafers, for RF GaN on silicon carbide and sapphire substrates. Sales for GaN on silicon epiwafers for power devices to

Nexperia under our long-term cooperation agreement are also included in this vertical. The epiwafer sales are carried out directly by us from our GaN MOCVD epiwafer department.

Marketing

Our target application markets for our GaN power products are power adapters and computing, datacenters and infrastructure, industrial and automotive. Our worldwide marketing efforts are coordinated out of our headquarters in Goleta, California and our offices in Campbell, California, Taiwan, Shenzhen China and Hong Kong. Key elements of our marketing efforts include:

- Participation and promotion in major power electronic tradeshows, conferences and events such as the Applied Power Electronics Conference in North America, PCIM Europe and PCIM Asia;
- Our website, which contains our product information, application notes and resources, evaluation boards, publications, events and various technical papers/white papers on wide-ranging topics such as quality and reliability, conferences, and presentations or papers;
- Electronic and print trade media and outlet advertising;
- Utilization of social media platforms such as LinkedIn, Facebook and Instagram;
- Advertising on Digikey and Mouser, with analytical monitoring and search analytics; and
- Regular press releases and announcements.

Nexperia Cooperation Agreement

In 2018, we entered into a five-year cooperation agreement with Nexperia, a stand-alone power semiconductor business spun out from NXP Semiconductors N.V., to secure funding for us and create a second source of supply for our GaN products or equivalent products, which certain customers may require to be available in the market for broader adoption of our products, and to enable a stronger long term outreach for the automotive market than possible with our own resources. Nexperia has begun promotion of their GaN products in the market, which is positive for the overall adoption of GaN solutions as well as for our business in particular, as Nexperia currently purchases epiwafers from us and has contracted to purchase epi material from us in the future when they produce their own epiwafers, as further described below. In connection with purchasing approximately \$16.0 million of our Series 3 convertible preferred stock in April 2018, Nexperia entered into a set of cooperation agreements with us including a development and license agreement (“DLA”), loan and security agreement (“LSA”) and supply agreement. On May 18, 2021, we entered into two new agreements (a strategic cooperation agreement and an option agreement) with Nexperia, as well as amendments to the LSA, DLA, and supply agreement.

Development and License Agreement

On April 4, 2018, we entered into the DLA with Nexperia, pursuant to which we agreed to develop and transfer to Nexperia certain manufacturing process technologies (excluding our epi process technology) to enable Nexperia to manufacture GaN-based products at Nexperia’s facilities. Nexperia also agreed to provide funding for the development of such technologies in return for limited exclusivities in automotive and other fields. Key components of the DLA include:

- Foundry Transfer: The DLA required transfer of our existing Gen-3 wafer fabrication process to Nexperia’s wafer fabrication facility in Hamburg, Germany. We received \$9.0 million of funds from Nexperia in relation to the transfer activity, associated intellectual property and projects completed to date. This transfer also creates a second source for GaN wafer fabrication, which we expect will facilitate broader adoption of GaN technology, as certain customers require multiple sources for risk mitigation.

- Technology Projects for “Pre-funded” Technology Loans and Licensing: Additionally, technology projects pertaining to our products and related activities were pre-funded by loans from Nexperia after we demonstrated that we had reached certain milestones (which have been completed). Such loans were deemed paid off when the target milestones identified in the statement of work were completed, and Nexperia secured a license to the technology developed pursuant to the DLA.

On May 18, 2021, we entered into an amended and restated development and license agreement (the “Amended DLA”) with Nexperia, pursuant to which granted Nexperia rights to sell products in the automotive field in Japan. Our rights to sell products in the automotive field in Japan remain in place under the Amended DLA. As per the original agreement, Nexperia’s exclusive rights for sale of products in the automotive field outside of Japan terminated on April 4, 2023. In addition, the Amended DLA clarified the ability of Nexperia’s customers to use products developed by Nexperia through exercise of its rights under this agreement.

Loan and Security Agreement

The LSA, entered into on April 4, 2018, originally comprised term loans in an aggregate principal amount of \$15.0 million, separated into tranches for pre-funded projects, and a \$10.0 million revolving loan, each of which bore 6% annual interest.

In June 2020, \$5.0 million of term loans was satisfied in full upon transfer of our Gen-4 technology development to Nexperia, at which point we recognized \$5.0 million as licensing revenue. In May 2021, \$2.0 million of term loans was converted into a revolving loan with the same terms and conditions as the initial \$10.0 million revolving loan. In July 2021, the remaining \$8.0 million term loan was satisfied in full upon transfer of our Gen-5 and 900 Volt technology developments to Nexperia, at which point we recognized \$8.0 million as perpetual licensing revenue.

As of March 31, 2023, there were no term loans and a \$12.0 million revolving loan outstanding under the LSA. We repaid the revolving loan in full on April 4, 2023, its scheduled maturity date.

Supply Agreement

Simultaneously with the DLA and LSA, we entered into a supply agreement with Nexperia, which was amended and restated on May 18, 2021. The supply agreement sets forth the terms under which Nexperia may purchase epiwafers and processed wafers from us, and we may purchase processed wafers from Nexperia. The agreement specifies that Nexperia is our priority customer with respect to epiwafers manufactured by Transphorm Japan Epi, Inc. (“TJE”), a Japanese subsidiary of ours through which we are engaged in the development, manufacturing and sales of GaN-based epiwafer products, and, accordingly, Nexperia has preferred utilization of extra capacity at TJE. The agreement also specifies procedures to address expansion of our epiwafer manufacturing capacity and Nexperia’s obligations with respect thereto. The initial term of the supply agreement is through December 31, 2025, with automatic one year renewals thereafter, and we may not terminate the supply agreement while the option agreement (described below) is in effect.

Strategic Cooperation Agreement

The strategic cooperation agreement serves as a framework agreement that describes the numerous agreements between the parties and provides Nexperia with information rights and inspection rights with respect to our business.

Option Agreement

The option agreement establishes the parameters pursuant to which Nexperia, in certain limited instances, is permitted to exercise an option (the “Option”) to acquire TJE. In general, the Option is exercisable upon (i) certain acquisitions of securities or assets of us or our subsidiaries by a Competitor (as defined in the option agreement) that results in us, directly or indirectly, owning less than a majority of TJE, which acquisition is followed by any material breach (that is not cured within a specified time period) by us or a subsidiary of our obligations with respect to epiwafer supply to Nexperia under our supply agreement with Nexperia, or (ii) the unilateral termination by us of the supply agreement. The option agreement also establishes the material terms, including price and timing, for the exercise of the Option by Nexperia. The Option terminates (i) if the Option is not exercised by Nexperia prior to the date on which the option agreement terminates, or (ii) on the first to occur of (a) the termination of the option agreement upon written agreement of the parties, (b) the mutual termination or expiration of the supply agreement, or (c) the first to occur of (1) two years following the date on which we notify Nexperia of epiwafer qualification of a second source and (2) April 1, 2028.

In connection with the option agreement, we also amended and restated our existing intracompany license agreement with TJE to clarify Nexperia’s rights upon exercise of the Option.

Employees and Human Capital

As of March 31, 2023, we had a total of 126 employees, of which approximately 103 are U.S.-based. We value and support hiring exceptional talent to develop our core technology and drive our business growth. None of our U.S. employees is represented by a labor union or covered by a collective bargaining agreement with respect to their employment with us. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity incentive plans are to attract, retain and reward personnel through the granting of stock-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Corporate Information

We were originally incorporated as Peninsula Acquisition Corporation in the State of Delaware in May 2017. Prior to our acquisition of Transphorm Technology, Inc. in February 2020, we were a “shell company” registered under the Exchange Act, with no specific business plan or purpose. In accordance with “reverse merger” accounting treatment, our historical financial statements as of period ends, and for periods ended, prior to our acquisition of Transphorm Technology were replaced with the historical financial statements of Transphorm Technology in our SEC filings made after the acquisition.

Our principal executive offices are located at 75 Castilian Dr., Goleta, California 93117. Our telephone number is (805) 456-1300.

Available Information

We are subject to the informational requirements of the Exchange Act, and, accordingly, file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, with the Securities and Exchange Commission (the “SEC”).

We maintain a website at www.transphormusa.com, to which we regularly post copies of our press releases as well as additional information about us. Our filings with the SEC are available free of charge through our website as soon as reasonably practicable after being electronically filed with or furnished to the SEC. The SEC also maintains a

website (<http://www.sec.gov>) that contains our SEC filings. Information contained in our website is not a part of, nor incorporated by reference into, this Report or our other filings with the SEC, and should not be relied upon.

Item 1A. Risk Factors.

An investment in our securities is highly speculative and involves a high degree of risk. We face a variety of risks that may affect our operations or financial results and many of those risks are driven by factors that we cannot control or predict. Investors should carefully consider the risks described below and all of the other information set forth in this Report, before deciding to invest in our common stock. If any of the risks described below occur, our business, financial condition, results of operations and prospects could be materially adversely affected. In that case, the market price of our common stock would likely decline and investors could lose all or a part of their investment. Only those investors who can bear the risk of loss of their entire investment should consider an investment in our securities. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our operations.

Risks Related to Our Business and the Industry in Which We Operate

We have a history of losses, anticipate increasing our operating expenses in the future, and may not be able to achieve or maintain profitability. If we cannot achieve or maintain profitability, stockholders could lose all or part of their investment.

Since our inception in 2007, we have generated minimal revenue and substantial net losses as we have devoted our resources to the development of our technology, and our business model has not been proven. As of March 31, 2023, we had an accumulated deficit of \$209.2 million. For the years ended March 31, 2023 and 2022, our net loss was \$30.6 million and \$10.2 million, respectively. We expect our operating expenses to continue to increase in the future as we expand our sales and marketing efforts and continue to invest in our infrastructure and the research and development of our technologies. These efforts may be more costly than we expect, and we may not be able to increase our revenue to offset our increased operating expenses. Our revenue growth may be slower than anticipated or our revenue may decline for a number of other reasons, including slower growth of, or reduced demand for, GaN power management solutions, increased competition, or any failure to capitalize on growth opportunities. If we are unable to generate sufficient revenue, we may never become profitable or be able to maintain any future profitability. If this were to occur, our stockholders could lose all or part of their investment.

If we do not successfully complete the rights offering and the asset-based debt financing initiatives we are pursuing (together, the “Short-term Financing Arrangements”), we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to fund our operations into the second half of September 2023.

We recently announced a rights offering for our common stock, which we expect to commence soon after the filing of this Report. If the rights offering is fully subscribed, we intend to raise up to \$15 million through the rights offering, to be used for working capital and general corporate purposes. We are also pursuing conventional asset-based debt financing initiatives that, if consummated and together with proceeds from a fully subscribed rights offering, would provide us with working capital well into the fiscal year ending March 31, 2025. There can be no assurance that the rights offering will be fully subscribed or that we will be successful in closing the debt financing. If the rights offering is completed but not fully subscribed or the debt financing is not closed, or does not raise the amounts that we hope for, our forecasted financial runway will be significantly reduced.

If we are unable to secure any additional funding through the Short-term Financing Arrangements, we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to fund our operations into the second half of September 2023. If we do not obtain any other financing, we would need to cease operations, liquidate our assets, and may seek the protection of applicable bankruptcy laws. Because all of our liabilities are senior to our common stock in our capital structure, any such liquidation or bankruptcy would likely result in the complete loss of your investment in our common stock. Therefore, trading in our securities is highly speculative and poses substantial risks.

Filing for bankruptcy would have a material adverse effect on our business, financial condition, results of operations and liquidity. If the bankruptcy proceeding was under Chapter 11 of the U.S. Bankruptcy Code, our senior management would be required to spend a significant amount of time and effort dealing with the reorganization instead of focusing exclusively on our business operations. Bankruptcy protection or any other liquidation proceedings would also make it very difficult to retain management and other key personnel necessary to operate our business, and we may lose our suppliers, customers and business partners, all of which would reduce the value of our assets and any potential value to our stockholders.

We intend to initiate a strategic review of opportunities to enhance stockholder value, and there can be no assurance that this strategic review will result in any transaction or that such transaction, if pursued, can be completed on attractive terms, or at all, or that such transaction will lead to increased stockholder value.

Assuming we are able to raise sufficient funds through the Short-term Financing Arrangements, we intend to initiate, in our second fiscal quarter ending September 30, 2023, a strategic review of opportunities to enhance stockholder value which may include, among other things, strategic partnerships with third parties with equity or debt investment, a sale of the Company or certain of our assets, strategic licensing, or other financing alternatives. Our strategic plans are not yet finalized and are subject to market conditions and other uncertainties. There can be no assurance that any strategic review will be successful, that it will result in a transaction on terms acceptable to us or our stockholders, or at all, or will result in increased stockholder value.

If we are unable to successfully execute our strategic review, or enter into a transaction on acceptable terms, we may be required to delay, limit or terminate our operations, liquidate our assets or restructure our liabilities, including potentially under the protection of applicable bankruptcy laws, any of which could result in the complete loss of your investment in our common stock.

Apart from the immediate capital needs that we hope to satisfy with the Short-term Financing Arrangements, our ability to continue as a going concern will still depend on us being able to raise significant additional capital to fund our operations, and this capital may be unavailable on attractive terms, if at all, and could dilute your investment.

Our recurring operating losses and current operating plans raise substantial doubt about our ability to continue as a going concern. We currently incur and historically have incurred losses from operations and expect to do so in the foreseeable future. During the year ended March 31, 2023, we raised gross proceeds of \$16.0 million from selling shares of our common stock in private placements and used \$26.5 million of cash in operations. As of March 31, 2023, we had \$15.5 million in cash and cash equivalents. In April 2023, we raised gross proceeds of \$7.3 million from the exercise of warrants and \$2.0 million from selling shares of our common stock in a private placement, but also used \$12.2 million of cash to repay our revolving loan with Nexperia when it matured on April 4, 2023.

Even if we successfully close the Short-term Financing Arrangements, we will be required to engage in additional equity or debt financings to secure additional funds. If we close one or more additional equity or convertible debt financings, our stockholders may experience significant dilution of their ownership interests, the rights given to new equityholders may be superior to those of our common stockholders and the per share value of our common stock could decline. Furthermore, if we engage in debt financing, the holders of debt would have priority over the holders of our common stock, and we may be required to accept terms that restrict our ability to run our business or incur additional indebtedness. The debt financing could also contain restrictive covenants that may impact how we run our business and could result in the loan being paid back in full immediately if we are in non-compliance. In addition, the current global macroeconomic environment may make it more difficult or preclude us from raising additional capital, increase our costs of capital and otherwise adversely affect our business, results of operations, financial condition and liquidity. If we are unable to raise additional capital when needed or on acceptable terms, we may not be able to, among other things:

- continue our business and operations;
- develop or enhance our products;

- continue to expand our sales and marketing and research and development organizations;
- acquire complementary technologies, products or businesses;
- expand operations, in the United States or internationally;
- hire, train and retain employees; or
- respond to competitive pressures or unanticipated working capital requirements.

Our failure to do any of these things could harm our business, financial condition and results of operations or require us to restructure our liabilities, including potentially under the protection of applicable bankruptcy laws.

Our joint venture arrangement involves numerous risks, including risks relating to the lack of full control of the joint venture (although key business decisions require unanimous consent), potential disagreements with our joint venture partner about how to manage the joint venture, conflicting interests of the joint venture, requirements to fund the joint venture and its business not being profitable.

We are party to a joint venture agreement with a third party for the ownership and operations of GaNovation, which wholly owns AFSW, a wafer fabrication facility located in Aizu Wakamatsu, Japan that we rely on for all of our GaN fab-wafer requirements. From August 2021 to April 9, 2023, we held a 25% interest in GaNovation. Pursuant to our joint venture agreement, our interest in GaNovation increased to 32.5%, effective April 10, 2023. Accordingly, we are now responsible for 32.5% of the funding obligations and losses of AFSW through our ownership interest in GaNovation, subject to a maximum of \$12.0 million for the three-year period beginning August 1, 2021. As of March 31, 2023, we had provided \$5.3 million of this \$12.0 million commitment to GaNovation. For the years ended March 31, 2023 and 2022, GaNovation's primary business activity related to the businesses of AFSW. For as long as we have had an ownership interest in AFSW, it has operated at a loss. Our share of the operating losses incurred by our joint venture during the years ended March 31, 2023 and 2022 was \$2.7 million and \$4.0 million, respectively. We expect our loss in joint venture will increase during the year ended March 31, 2024 due to the increase in our ownership interest in GaNovation from 25% to 32.5%, effective April 10, 2023.

In the future, we may enter into additional joint venture arrangements, including the addition of partners in AFSW or GaNovation, which could reduce our cash-funding obligations to AFSW. Although we take steps to carefully select our partners, our current and any future joint ventures may not be successful. Our joint venture partners may have economic, business or legal interests or goals that are inconsistent with ours, or those of the joint venture. Moreover, if our joint venture partners fail to invest in the joint venture in the manner that is anticipated or otherwise fail to meet their contractual obligations, the joint venture may be unable to adequately perform and conduct its operations, requiring us to make additional investments or perform additional services to ensure the adequate performance and delivery of products and/or services to the joint venture's customers, which could have a material adverse effect on our business, financial condition, results of operations and cash flows. Failure by us, or an entity in which we have a joint venture interest, to adequately manage the risks associated with such joint venture could have a material adverse effect on the financial condition or results of operations of our joint venture and, in turn, our business, financial condition, cash flows and results of operations.

Our quarterly results of operations are likely to vary from period to period, which could cause the market price of our common stock to fluctuate or decline.

Our results of operations have varied from period to period, and we expect that our quarterly results of operations will continue to vary as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- our ability to raise additional financing in both the short-and long-term to continue our operations;

- our ability to attract new and retain existing customers, including due to our perceived or actual financial condition;
- the budgeting cycles and purchasing practices of customers;
- the timing and length of our sales cycles, including the ability of our customers to design-in successfully with GaN power solutions;
- changes in customer requirements or market needs, including market acceptance of GaN technology;
- the timing and impact of new product introductions by us or our competitors or any other change in the competitive landscape of the semiconductor industry, including consolidation among our customers or competitors;
- deferral of orders from customers in anticipation of new products or product enhancements announced by us or our competitors;
- our ability to execute on our growth strategy and operating plans;
- our ability to successfully expand our business domestically and internationally;
- our ability to successfully compete with other companies in our market;
- changes in our pricing policies or those of our competitors;
- any disruption in, or termination of, our relationship with channel partners;
- insolvency or credit difficulties confronting our customers, affecting their ability to purchase or pay for our products, or confronting our key suppliers, which could disrupt our supply chain;
- the cost and potential outcomes of potential future litigation;
- general economic conditions, both domestic and in our foreign markets; and
- the amount and timing of operating costs and capital expenditures related to the expansion of our business.

Any of the above factors, individually or in the aggregate, may result in significant fluctuations in our quarterly operating results. As a result of this variability, our historical results of operations should not be relied upon as an indication of future performance. Moreover, this variability and unpredictability could result in our failure to follow through on our operating plans or meet the expectations of investors for any period. If we fail to follow through on our operating plans or meet such expectations for these or other reasons, the market price of our common stock could fall substantially.

We are exposed to foreign currency exchange rate fluctuations. Although we hedge certain currency risks, our hedging strategies may not be successful in mitigating our risks and changes in foreign currency exchange rates may adversely affect our financial condition, cash flows and results of operations.

We are exposed to fluctuations in foreign currency exchange rates, primarily the Japanese Yen, from our international operations. We translate revenues and other results denominated in foreign currencies into U.S. dollars for our consolidated financial statements. If the U.S. dollar strengthens relative to foreign currencies, particularly the Japanese Yen, there will be a negative impact on our operating results upon translation of those foreign operating results into the U.S. dollar and may distort period to period comparisons. For example, our loss from foreign currency exchange rate fluctuations was \$0.2 million and \$0.3 million for the years ended March 31, 2023 and 2022,

respectively. While we recently began to hedge against certain exchange rate risks in an effort to minimize the impact of currency exchange rate fluctuations, we typically enter into hedging contracts with maturities of up to 12 months, leaving us exposed to longer term changes in exchange rates. These hedges may not fully offset the negative impacts on our financial condition from currency exchange rate fluctuations. To the extent that these hedges are inadequate, or if there are significant currency exchange rate fluctuations in currencies for which we do not have hedges in place, our reported financial results could be materially adversely affected. Furthermore, if a financial counterparty to our hedges experiences financial difficulties or is otherwise unable to honor the terms of the foreign currency hedge, we may experience material financial losses.

We may not be able to develop new technologies and products to satisfy changes in customer demand or industry standards, and our competitors could develop products that decrease the demand for our products.

Rapidly changing technologies and industry standards, along with frequent new product introductions, characterize the industries of many of our customers and potential customers. Our financial performance depends, in part, on our ability to design, develop, manufacture, assemble, test, market and support new products and enhancements on a timely and cost-effective basis.

Our products have not been proven commercially on the scale of conventional power semiconductor products. The principal focus of our research and development activities has been to improve processes and support our ongoing development of GaN power management solutions. These projects are subject to various risks and uncertainties we are not able to control, including changes in customer demand or industry standards and the introduction of new or superior technologies by others. Moreover, any failure by us in the future to develop new technologies or timely react to changes in existing technologies could materially delay our development of new products, which could result in product obsolescence, decreased revenues and a loss of our market share to our competitors. In addition, products or technologies developed by others may render our products or technologies obsolete or non-competitive. Further, if our products are not in compliance with prevailing industry standards, such non-compliance could materially and adversely affect our financial condition, cash flows and results of operations.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense. As a result, our revenue is difficult to predict and may vary substantially from period to period, which may cause our results of operations to fluctuate significantly.

Our results of operations may fluctuate, in part, because of the resource intensive nature of our sales efforts, the length and variability of our sales cycle and the short-term difficulty in adjusting our operating expenses. To the extent our competitors develop products that our prospective customers view as equivalent or superior to ours, the average duration of our sales cycles may increase, and our sales efforts may be less successful. Because the length of time required to close a sale varies substantially from customer to customer, it is difficult to predict exactly when, or even if, we will make a sale with a potential customer. As a result, individual sales have, in some cases, occurred in quarters subsequent to or in advance of those we anticipated, or have not occurred at all, which makes it difficult for us to forecast our revenue accurately in any quarter. Because a substantial portion of our expenses are relatively fixed in the short term, our results of operations will suffer if our revenue falls below expectations in a particular quarter, which could cause the market price of our common stock to decline.

We must commit resources to development, design and production prior to receipt of purchase commitments and could lose some or all of the associated investment.

Our sales are typically made pursuant to individual purchase orders, rather than pursuant to long-term supply contracts. Many of these purchase orders may be revised or canceled without penalty. As a result, we typically must commit resources to the design, development, and production of products without any advance purchase commitments from customers. Any inability to sell a product after we devote resources to it could materially and adversely affect our financial condition, cash flows and results of operations.

Unfavorable worldwide economic conditions (including inflation), may negatively affect our business, financial condition and results of operations.

The global economic downturn and volatility and adverse conditions in the capital and credit markets have negatively affected levels of business and consumer spending, heightening concerns about the likelihood of a global recession and potential default of various national bonds and debt backed by individual countries. Such developments, as well as the politics impacting these, could adversely affect our financial results. Uncertainty about worldwide economic conditions poses a risk as businesses may further reduce or postpone spending in response to reduced budgets, tight credit, negative financial news and declines in income or asset values, which could adversely affect our business, financial condition and results of operations and increase the volatility of our stock price.

Inflation has also risen globally to historically high levels. If the inflation rate continues to increase, the costs of labor and other expenses could also increase. There is no assurance that our revenues will increase at the same rate that costs could increase. Inflation and government efforts to combat inflation, such as raising the benchmark interest rate, have increased and could continue to increase market volatility and have an adverse effect on the financial market and global economy. Such adverse conditions could negatively impact demand for our products, which could adversely affect our business, financial condition and results of operations.

We compete in highly competitive markets, and competitive pressures from existing and new companies may adversely impact our business and operating results.

The markets in which we compete are highly competitive. We expect competition to intensify in the future as existing competitors and new market entrants introduce new products into our markets. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses, and the loss of market share, any of which could seriously harm our business, financial condition and results of operations. If we do not keep pace with product and technology advances and otherwise keep our product offerings competitive, there could be a material and adverse effect on our competitive position, revenue and prospects for growth. Many of our existing competitors, such as silicon-based product providers (e.g., Infineon, ST Microelectronics, Toshiba and ON Semiconductor), silicon carbide-based product providers (e.g., Rohm, Infineon and Wolfspeed) and other high-voltage GaN product providers (e.g., Power Integrations, Infineon, Panasonic, GaN Systems, Navitas, Texas Instruments and Innoscience), have, and some of our potential competitors could have, substantial competitive advantages such as:

- greater name recognition, longer operating histories and larger customer bases;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with channel partners and customers;
- broader and deeper product lines;
- greater customer support resources;
- greater resources to make acquisitions;
- lower labor and research and development costs;
- substantially greater financial and other resources; and
- larger scale manufacturing operations.

In addition, some of our larger competitors have substantially broader product offerings and may be able to leverage their relationships with channel partners and customers based on other products to gain business in a manner that discourages users from purchasing our products, including by selling at zero or negative margins or product

bundling. Potential customers may also prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. As a result, even if the features of our products are superior, customers may not purchase our products. In addition, innovative start-up companies, and larger companies that are making significant investments in research and development, may invent similar or superior products and technologies that compete with our products. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources. If we are unable to compete successfully, or if competing successfully requires us to take costly actions in response to the actions of our competitors, our business, financial condition and results of operations could be adversely affected.

We rely on third-party channel partners to sell our products. If our partners fail to perform, our ability to sell our products and services could be limited, and if we fail to optimize our channel partner model going forward, our operating results could be harmed.

A portion of our revenue is generated through sales by our channel partners, which include distributors and resellers. To the extent our channel partners are unsuccessful in selling our products, we are unable to enter into arrangements with, and retain, a sufficient number of effective channel partners in each of the regions in which we sell products or we are unable to keep our channel partners motivated to sell our products, our ability to sell our products and our operating results could be harmed. The termination of our relationship with any significant channel partner may adversely impact our sales and operating results.

We rely on limited sources of wafer fabrication, packaged products fabrication and product testing, the loss of which could delay and limit our product shipments.

AFSW currently satisfies all of our GaN fab-wafer requirements (i.e., when a GaN epiwafer undergoes various processes at a wafer fabrication facility). While we believe AFSW has sufficient capacity for our near-term business needs and is reasonably scalable as our demand for throughput increases, any disruption in the AFSW fabrication facilities may severely impact our supply. In the event we are unable to continuously sustain the AFSW fabrication facility, securing supply from another source and adapting our process at such source would lead to a significant set of challenges, additional costs and delays.

We also utilize relatively standard back-side wafer processing services such as wafer-thinning and wafer back-side metalization from foundries in Asia. These suppliers also offer such services to other companies, which may lead to us not having access to adequate capacity for our needs and our customers' needs. We may have less control over delivery schedules and overall support versus other customers and users of those facilities. If the wafer foundries we use are unable or unwilling to manufacture our products in our required volumes, or at specified times, we may have to identify and qualify acceptable additional or alternative foundries. This qualification process could typically take three to six months and we may not find sufficient capacity in a timely manner or at an acceptable cost to satisfy our production requirements.

We additionally use outsourced assembly and test providers ("OSATs") for packaging and testing of our products. We utilize multiple OSATs for various package types and a single OSAT for each type of package. These OSATs may take time, or may be unable, to respond if our throughput demands increase, particularly if we expect a rapid increase in production and could harm our ability to meet unexpected rises in demand in an acceptable time frame. If the OSATs we use are unable or unwilling to package and test our products in our required volumes, or at specified times, we may have to identify and qualify acceptable additional or alternative OSATs. This qualification process would typically take three to nine months and we may not find sufficient capacity in a timely manner or at an acceptable cost to satisfy our production requirements.

Some companies that supply products to our customers are similarly dependent on a limited number of suppliers. These other companies' products may represent important components of power adapters, inverters and other products into which our products are designed. If these companies are unable to produce the volumes demanded by our customers, our customers may be forced to slow down or halt production on the equipment for which our products are designed, which could materially impact our order levels.

We rely on third parties for supply of raw materials and parts, assembly and test services, and transportation, among other things, and we generally cannot control their availability or conditions of supply or services.

We rely on third-party suppliers and service providers, including raw material and components suppliers, OSATs, freight carriers and distributors, in manufacturing our products. This reliance involves several risks, including reduced control over availability, capacity utilization, delivery schedules, costs, and supply chain allocations. We currently source all of our package and test requirements from OSATs that are located predominantly in the Philippines and to a lesser extent in Taiwan and China. Since these OSATs might also provide services to our competitors, periods of increased industry demand may result in capacity constraints.

We obtain our wafer products from our joint venture wafer fabrication facility located in Japan, and we manufacture our epi-wafers at our facilities in California and Japan. In the future, we plan to additionally obtain our epi-wafers from a facility in Taiwan. With respect to suppliers and other service providers located in Taiwan, geopolitical changes in China-Taiwan relations could disrupt their operations, which could adversely affect our ability to scale certain products and as a result, could adversely affect our business and results of operations.

Our and our vendors' manufacturing processes require availability of certain raw materials and supplies. Limited or delayed access to these items could adversely affect our results of operations. In certain instances, one of our vendors may be the sole source of highly specialized processing services or materials. If such vendor is unable or unwilling to manufacture and deliver components to us on the time schedule and of the quality or quantity that we require, we may be forced to seek to engage an additional or replacement vendor, which could result in additional expenses and delays in product development or shipment of product to our customers. If additional or replacement vendors are not available, we may also experience delays in product development or shipment which could, in turn, result in the temporary or permanent loss of customers and as a result could adversely affect our business and results of operations.

We cannot predict the extent to which the United States or other countries will impose quotas, duties, tariffs, taxes or other similar restrictions on the import or export of goods in the future, nor can we predict future trade policy or the terms of any renegotiated trade agreements and their impact on our business. The adoption and expansion of trade restrictions, the occurrence of a trade war, or other governmental action related to tariffs or trade agreements or policies has the potential to adversely impact demand for our products, our costs, our customers, our suppliers, and the U.S. economy, which in turn could have a material adverse effect on our business, financial condition and results of operations.

Because we depend on third-party manufacturers to build portions of our products, we are susceptible to manufacturing delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales, income and customers.

We depend on third-party manufacturers to build several stages of our products. Our reliance on these third-party manufacturers reduces our control over the manufacturing process and exposes us to risks, including reduced control over quality assurance, product costs, and product supply and timing. Any manufacturing disruption by these third-party manufacturers could severely impair our ability to fulfill orders. Our reliance on third-party manufacturers also creates the potential for infringement or misappropriation of our intellectual property. If we are unable to manage our relationships with third-party manufacturers effectively, or if our third-party manufacturers experience delays or disruptions for any reason, increased manufacturing lead-times, capacity constraints or quality control problems in their manufacturing operations, or if they otherwise fail to meet our future requirements for timely delivery, our ability to ship products to our customers would be severely impaired, and our business and results of operations would be seriously harmed.

Our business could be adversely affected by the effects of health epidemics or pandemics in regions where we or third parties on which we rely have manufacturing or other business operations.

The effects of health epidemics or pandemics could materially affect our operations globally, including at our headquarters in California and at our subsidiaries in Japan. For example, government authorities around the world

implemented numerous measures to try to contain the COVID-19 virus, such as travel bans and restrictions, quarantines, shelter-in-place or stay-at-home orders, and business shutdowns. During the COVID-19 pandemic, we also took precautionary measures intended to minimize the risk of the virus to our employees, our customers, and the communities in which we operate. For example, we at times required our employees to work remotely unless they could not perform their essential functions remotely and temporarily suspended all non-essential travel, which negatively impacted our customer success efforts and sales and marketing efforts during that time. In addition, as a result of the COVID-19 pandemic, some of our customers experienced delays in their internal development programs and design cycles with our GaN products, which led to postponements of their orders of our products and postponements of determinations that our products will be used in their designs for new products under development with corresponding delays in their market introduction and our achievement of revenues. We may continue to experience an adverse impact to our business as a result of the continued global economic impact of the pandemic.

An earthquake, terrorist attack or other man-made or natural disaster could negatively impact our business and operating results.

The occurrence of any catastrophic event, including an earthquake, fire, flood, tsunami, the effects of climate change, or other weather event, power loss, telecommunications failure, software or hardware malfunctions, epidemic or pandemic diseases, cyber-attack, military conflict or war, or terrorist attack, could materially impair our operations globally. For example, our principal executive offices and primary epiwafer operating facilities are situated near Santa Barbara, California, and most of our major suppliers, which are wafer foundries and assembly houses, are located in areas that have been subject to severe earthquakes and are susceptible to other disasters such as tropical storms, typhoons or tsunamis. In the event of a disaster, such as an earthquake and tsunami in Japan, we or one or more of our major suppliers may be temporarily unable to continue operations and may suffer significant property damage. Any interruption in our ability, or that of our major suppliers, to continue operations could delay the development and shipment of our products and have a substantial negative impact on our financial results. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure you that the amounts or coverage of insurance will be sufficient to satisfy any damages and losses, particularly as climate change continues to increase the risk of climate-related natural disasters.

We rely on our management team and other key employees and will need additional personnel to grow our business. The loss of one or more key employees or our inability to attract and retain qualified personnel could harm our business.

Our future success is substantially dependent on our ability to attract, retain and motivate the members of our management team and other key employees throughout our organization. The loss of one or more members of our management team or other key employees could materially impact our sales or our research and development programs and materially harm our business, financial condition, results of operations and prospects. We do not maintain key person life insurance policies on any of our management team members or key employees. Competition for highly skilled personnel is intense. We may not be successful in attracting or retaining qualified personnel to fulfill our current or future needs. For positions in our offices near Santa Barbara, California in particular, we may experience challenges hiring new and mid-level employees in part due to the high local housing costs. Our competitors may be successful in recruiting and hiring members of our management team or other key employees, and it may be difficult for us to find suitable replacements on a timely basis, on competitive terms, or at all.

If we fail to effectively manage our growth, our business, financial condition and results of operations would be harmed.

We are a development stage company with 126 employees as of March 31, 2023 and are subject to the strains of ongoing development and growth, which has placed significant demands on our management and our operational and financial infrastructure. To manage any growth effectively, we must continue to improve our operational, financial and management systems and controls by, among other things:

- effectively attracting, training and integrating new employees, particularly members of our sales, applications and research and development teams;
- further improving our key business applications, processes and IT infrastructure to support our business needs;
- enhancing our information and communication systems to ensure that our employees and offices around the world are well coordinated and can effectively communicate with each other and our channel partners and customers; and
- appropriately documenting and testing our IT systems and business processes.

These and other improvements in our systems and controls will require significant capital expenditures and the allocation of valuable management and employee resources. If we fail to implement these improvements effectively, or do not have the financial resources to pursue and implement these actions in full, or at all, our ability to manage growth and ensure ongoing operation of key business systems would be impaired, and our business, financial condition and results of operations would be harmed.

We are subject to a number of risks associated with international sales and operations.

We have small teams that are engaged in marketing, selling and supporting our products internationally. As a result, we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing and retaining international employees, particularly managers and other members of our international sales team, we may experience difficulties in sales productivity in, or market penetration of, foreign markets. We also enter into strategic distributor and reseller relationships with companies in certain international markets where we do not have a local presence. If we are not able to maintain successful strategic distributor and reseller relationships with our international channel partners or recruit additional channel partners, our future success in these international markets could be limited.

Investments in us may be subject to U.S. foreign investment regulations which may impose conditions on or limit certain investors' ability to purchase or hold our common stock, potentially limiting our ability to enter into or maintain strategic relationships and making our common stock less attractive to investors.

Under section 721 of the U.S. Defense Production Act of 1950, as amended (the "DPA"), the U.S. President has the power to disrupt or block certain foreign investments in U.S. businesses if the President determines that such a transaction threatens U.S. national security. The Committee on Foreign Investment in the United States ("CFIUS") has the authority to conduct national security reviews of certain foreign investments. CFIUS may clear a transaction, negotiate or impose mitigation measures as a prerequisite to granting clearance of a transaction, or recommend that the President impose conditions or block the transaction or force divestment if the transaction has closed. The Foreign Investment Risk Review Modernization Act ("FIRRMA"), enacted in 2018, amended the DPA to, among other things, expand CFIUS's jurisdiction beyond acquisitions of control of U.S. businesses. CFIUS also has jurisdiction over certain foreign non-controlling investments in U.S. businesses that involve critical technology or critical infrastructure, or that collect and maintain sensitive personal data of U.S. citizens ("TID U.S. Businesses"). We are a TID U.S. Business because we develop and design technologies that would be considered critical technologies. Certain foreign investments in TID U.S. Businesses are subject to mandatory filing with CFIUS. We have received and may continue to receive foreign investments, some of which may be subject to CFIUS jurisdiction. The enhanced scrutiny and potential restrictions on the ability of foreign persons to invest in us could limit our ability to engage in strategic transactions that could benefit our stockholders, including a change of control, and could also affect the price that an investor may be willing to pay for our common stock.

We are subject to government regulation, including import, export and economic sanctions laws and regulations that may expose us to liability and increase our costs.

Our products and technology are subject to U.S. export controls, including the U.S. Department of Commerce's Export Administration Regulations and economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. These regulations may limit the export of our products and technology, and provision of our services outside of the United States, or may require export authorizations, including by license, a license exception, or other appropriate government authorizations and conditions, including annual or semi-annual reporting. Export control and economic sanctions laws may also include prohibitions on the sale or supply of certain of our products to embargoed or sanctioned countries, regions, governments, persons, and entities. In addition, various countries regulate the importation of certain products, through import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products. The exportation, re-exportation, and importation of our products and technology and the provision of services, including by our partners, must comply with these laws or else we may be adversely affected, through reputational harm, government investigations, penalties, and a denial or curtailment of our ability to export our products and technology. Complying with export control and sanctions laws may be time-consuming and may result in the delay or loss of sales opportunities. Although we take precautions to prevent our products and technology from being provided in violation of such laws, our products and technology may have previously been, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we are found to be in violation of U.S. sanctions or export control laws, it could result in substantial fines and penalties for us and for the individuals working for us. Export or import laws or sanctions policies are subject to rapid change and have been the subject of recent U.S. and non-U.S. government actions. Changes in export or import laws or sanctions policies, may adversely impact our operations, delay the introduction and sale of our products in international markets, or, in some cases, prevent the export or import of our products and technology to certain countries, regions, governments, persons, or entities altogether, which could adversely affect our business, financial condition and results of operations.

Our sales to government customers subject us to uncertainties regarding fiscal funding approvals, renegotiations or terminations at the discretion of the government, as well as audits and investigations, which could result in litigation, penalties and sanctions including early termination, suspension and debarment.

Our multi-year contracts signed with agencies and departments of the U.S. government are generally subject to annual fiscal funding approval and may be renegotiated or terminated at the discretion of the government. Termination, renegotiation or the lack of funding approval for a contract could adversely affect our sales, revenue and reputation. Additionally, our government contracts are generally subject to requirements that are not typically present in commercial contracts, such as various Federal Acquisition Regulation or Defense Federal Acquisition Regulation clauses. These clauses place certain requirements upon us such as compliance with equal opportunity employment, safeguarding of contractor information systems, executive compensation restrictions and reporting of certain lobbying activities. Government contracts are also subject to audits and investigations. Failure to meet contractual requirements could result in various civil and criminal actions and penalties, and administrative sanctions, including termination of contracts, refund of a portion of fees received, forfeiture of profits, suspension of payments, fines and suspensions or debarment from doing business with the government, any of which could materially adversely affect our business, financial condition and results of operations.

Failure to comply with anti-bribery, anti-corruption and anti-money laundering laws could subject us to penalties and other adverse consequences.

We are subject to the U.S. Foreign Corrupt Practices Act ("FCPA") and other anti-corruption, anti-bribery, and anti-money laundering laws in the jurisdictions in which we do business, both domestic and abroad. These laws generally prohibit us and our employees from improperly influencing government officials or commercial parties in order to obtain or retain business, direct business to any person or gain any improper advantage. The FCPA and similar applicable anti-bribery and anti-corruption laws also prohibit our third-party business partners, representatives and agents from engaging in corruption and bribery. We and our third-party business partners, representatives and agents may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities. We may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, channel partners and agents, even if we do not explicitly authorize such activities. These laws also require that we keep accurate books and records and maintain internal controls and compliance procedures designed to prevent any such actions. Any violation of the

FCPA or other applicable anti-bribery, anti-corruption laws and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, imposition of significant legal fees, loss of export privileges, severe criminal or civil sanctions or suspension or debarment from U.S. government contracts, substantial diversion of management's attention, drop in stock price or overall adverse consequences to our business, all of which may have an adverse effect on our reputation, business, financial condition, and results of operations.

Our business may be affected by litigation and government investigations.

We may from time to time receive inquiries and subpoenas and other types of information requests from government authorities and others and we may become subject to claims and other actions related to our business activities. While the ultimate outcome of investigations, inquiries, information requests and legal proceedings is difficult to predict, defense of litigation claims can be expensive, time-consuming and distracting, and adverse resolutions or settlements of those matters may result in, among other things, modification of our business practices, costs and significant payments, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Related to Our Intellectual Property

Any failure by us to protect our proprietary technologies or maintain the right to use certain technologies may negatively affect our ability to compete.

To compete effectively, we must protect our intellectual property. We rely on a combination of patents, trademarks, copyrights, trade secret laws, confidentiality procedures and licensing arrangements to protect our intellectual property rights. We hold numerous patents and have a number of pending patent applications. However, our portfolio of patents evolves as new patents are issued and older patents expire and the expiration of patents could have a negative effect on our ability to prevent competitors from duplicating certain or all of our products.

We might not succeed in obtaining patents from any of our pending applications. Even if we are awarded patents, they may not provide any meaningful protection or commercial advantage to us, as they may not be of sufficient scope or strength, or may not be issued in all countries where our products can be sold. In addition, our competitors may be able to design around our patents.

There can be no assurance that an issued patent will remain valid and enforceable in a court of law through the entire patent term. Should the validity of a patent be challenged, the legal process associated with defending the patent can be costly and time consuming. Issued patents can be subject to oppositions, interferences and other third party challenges that can result in the revocation of the patent or limit patent claims such that patent coverage lacks sufficient breadth to protect subject matter that is commercially relevant. Competitors may be able to circumvent our patents. In cases where market ramp of our products may encounter delays it is possible that some patents or licensed patents covering the product has expired or will be in force for only a short period of time following such market ramp. We cannot predict with any certainty if any third party U.S. or foreign patent rights, or other proprietary rights, will be deemed infringed by the use of our technology. Nor can we predict with certainty which, if any, of these rights will or may be asserted against us by third parties.

To protect our product technology, documentation and other proprietary information, we enter into confidentiality agreements with our employees, customers, consultants and strategic partners. We require our employees to acknowledge their obligation to maintain confidentiality with respect to our products. Despite these efforts, we cannot guarantee that these parties will maintain the confidentiality of our proprietary information in the course of future employment or working with other business partners. We develop, manufacture and sell our products in Asia and other countries that may not protect our intellectual property rights to the same extent as the laws of the United States. This makes piracy of our technology and products more likely. Steps we take to protect our proprietary information may not be adequate to prevent theft of our technology. We may not be able to prevent our competitors from independently developing technologies and products that are similar to or better than ours.

Vigorous protection and pursuit of intellectual property rights or positions characterize the semiconductor industry. This often results in expensive and lengthy litigation. We, and our customers or suppliers, may be accused of infringing patents or other intellectual property rights owned by third parties in the future. An adverse result in any litigation against us or a customer or supplier could force us to pay substantial damages, stop manufacturing, using and selling the infringing products, spend significant resources to develop non-infringing technology, discontinue using certain processes or obtain licenses to use the infringing technology. In addition, we may not be able to develop non-infringing technology or find appropriate licenses on reasonable terms or at all.

Patent disputes in the semiconductor industry between industry participants are often settled through cross-licensing arrangements. Our portfolio of patents may not have the breadth to enable us to settle an alleged patent infringement claim through a cross-licensing arrangement, especially for patent disputes brought by non-practicing entities (patent holders who do not manufacture products but only seek to monetize patent rights) that cannot be settled through cross-licensing and cannot be avoided through cross-licensing with industry practitioners. We may therefore be more exposed to third-party claims than some of our larger competitors and customers.

Customers may make claims against us in connection with infringement claims made against them that are alleged to relate to our products or components included in our products, even where we obtain the components from a supplier. In such cases, we may incur monetary losses due to cost of defense, settlement or damage award and non-monetary losses as a result of diverting valuable internal resources to litigation support. To the extent that claims against us or our customers relate to third-party intellectual property integrated into our products, there is no assurance that we will be fully or even partially indemnified by our suppliers against any losses.

Furthermore, we may initiate claims or litigation against third parties for infringing our proprietary rights or to establish the validity of our proprietary rights. This could consume significant resources and divert the efforts of our technical and management personnel, regardless of the litigation's outcome.

If we fail to comply with our obligations under any license, collaboration or other agreements, we may be required to pay damages and could lose certain intellectual property rights.

Our current licenses impose, and any future licenses we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement and other obligations on us. If we breach any of these obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license, which could result in us being unable to develop, manufacture and sell products that are covered by the licensed technology or could enable a competitor to gain access to the licensed technology. Moreover, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights in such unlicensed intellectual property. The amount of our future royalty obligations will depend on the technology and intellectual property we use in products that we successfully develop, manufacture and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

Additionally, our option agreement with Nexperia establishes the parameters pursuant to which Nexperia, in certain limited instances (some of which may be beyond our control), is permitted to exercise an option (the "Option") to acquire our wholly owned subsidiary, Transphorm Japan Epi, Inc. ("TJE"). In general, the Option is exercisable upon (i) certain acquisitions of securities or assets of us or our subsidiaries by a Competitor (as defined in the option agreement) that results in us, directly or indirectly, owning less than a majority of TJE, which acquisition is followed by any material breach (that is not cured within a specified time period) by us or a subsidiary of our obligations with respect to epiwafer supply to Nexperia under our supply agreement with Nexperia, or (ii) the unilateral termination by us of the supply agreement. While TJE's epiwafer capacity currently is not required for production of our products, if such a "forced sale" event were to happen in the future, we could be required to purchase a portion of our epiwafer requirements from a third party. This could impact our epiwafer costs, reduce any overall profits, or cause us to lose a portion of our capacity, requiring us to generate more epiwafer capacity earlier than planned. This

would result in greater capital expenditure than anticipated, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Related to Our Financial Control Environment

Being a public company can be administratively burdensome and expensive.

As a public reporting company, we are subject to the information and reporting requirements of the Securities Act, the Exchange Act and other federal securities laws, rules and regulations related thereto, including compliance with the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), and the Dodd-Frank Wall Street Reform and Consumer Protection Act. In addition, we are subject to the listing standards of the Nasdaq Capital Market. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Among other things, we are required to:

- maintain and evaluate a system of internal controls over financial reporting in compliance with the requirements of Section 404 of the Sarbanes-Oxley Act and the related rules and regulations of the SEC and the Public Company Accounting Oversight Board;
- maintain policies relating to disclosure controls and procedures;
- prepare and distribute periodic reports in compliance with our obligations under federal securities laws;
- institute a more comprehensive compliance function, including with respect to corporate governance; and
- involve, to a greater degree, our outside legal counsel and accountants in the above activities.

The costs of preparing and filing annual and quarterly reports, proxy statements and other information with the SEC and furnishing audited reports to stockholders is expensive and compliance with these rules and regulations requires us to continue to hire additional financial reporting, internal controls and other finance personnel, and will continue to involve a material increase in regulatory, legal and accounting expenses and the attention of our board of directors and management. In addition, being a public company makes it more expensive for us to obtain director and officer liability insurance. In the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain this coverage. These factors could also make it more difficult for us to attract and retain qualified executives and members of our board of directors.

Any failure to maintain effective internal controls over our financial reporting could materially and adversely affect us.

Section 404 of the Sarbanes-Oxley Act requires us to include in our annual reports on Form 10-K an assessment by management of the effectiveness of our internal controls over financial reporting. However, for as long as we remain an emerging growth company or a smaller reporting company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

We are continuing to develop and refine our disclosure controls and other procedures that are designed to ensure that information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and that information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers. We are also continuing to improve our internal control over financial reporting. We have expended, and anticipate that we will continue to expend, significant resources in order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude that our internal control over financial reporting is effective as required by Section 404. For example, in connection with the audit of our consolidated financial statements for the years ended March 31, 2023 and 2022, the three-month transition period ended March 31, 2021,

and the year ended December 31, 2020, we identified material weaknesses in our internal control over financial reporting. We cannot predict the outcome of our testing in future periods. If we identify additional material weaknesses in the future or are unable to remediate the material weakness we currently have, our financial statements may be inaccurate and investors could lose confidence in the reliability of our financial statements, which in turn could negatively affect the market price of our common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Capital Market.

We have identified a material weakness in our internal control over financial reporting that, if not properly remediated, could result in material misstatements in our consolidated financial statements in future periods.

We have limited accounting and financial reporting personnel and other resources with which to address our internal controls and related procedures. As disclosed in Item 9A of this Report, in connection with the audit of our consolidated financial statements for the years ended March 31, 2023 and 2022, we identified one material weakness in our internal control over financial reporting related to insufficient personnel with technical accounting knowledge and financial reporting experience resulting in inadequate performance of review controls with respect to certain areas of our financial statements. Accordingly, we were not able to assert that our internal control over financial reporting was effective as of March 31, 2023 or March 31, 2022. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis.

Management has initiated corrective actions and procedures to remediate the identified material weakness, including hiring additional personnel with technical accounting knowledge and financial reporting experience, and has started to implement processes to support the complexity of our financial statements. We anticipate that these initiatives will be at least partially, if not fully, implemented by the end of fiscal year 2024. However, our ability to continue these remediation efforts is contingent upon our ability to raise significant additional funding. Remediation of the material weakness will require management attention and cause us to incur additional expenses, and is dependent on our ability to raise significant additional funding to support our operations, including these initiatives. If we fail to remediate the material weakness, or if we are unable to maintain effective controls and procedures in the future, our ability to record, process, summarize and report financial information accurately and within the time periods specified in SEC rules and forms could be adversely affected. This failure could negatively affect the market price and trading liquidity of our common stock, cause investors to lose confidence in our reported financial information, subject us to civil and criminal investigations and penalties, and generally materially and adversely impact our business and financial condition.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operations could fall below the expectations of investors, resulting in a decline in the market price of our common stock.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the amounts reported in our financial statements. Significant assumptions and estimates used in preparing our financial statements include those related to assets, liabilities, revenue, expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of investors, resulting in a decline in the market price of our common stock.

Changes in accounting rules and regulations, or interpretations thereof, could result in unfavorable accounting charges or require us to change our compensation policies.

Accounting methods and policies for companies such as ours, including policies governing revenue recognition, leases, research and development and related expenses, and accounting for stock-based compensation, are subject to review, interpretation and guidance from our auditors and relevant accounting authorities, including the SEC. Changes to accounting methods or policies, or interpretations thereof, may require us to reclassify, restate or otherwise change or revise our historical financial statements, including those contained in this Report.

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

We have incurred substantial losses during our history, do not expect to become profitable in the near future and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation’s ability to use its pre-change net operating loss carryforwards (“NOLs”), and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. The Merger, our prior equity offerings and other changes in our stock ownership may have resulted in ownership changes. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which are outside of our control. As a result, if we earn net taxable income, our ability to use our pre-change NOLs to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Risks Related to Ownership of Our Common Stock

We are an “emerging growth company” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company” as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including (1) not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, (2) reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and (3) exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until the last day of our fiscal year ending March 31, 2026, although circumstances could cause us to lose that status earlier.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use the extended transition period under the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company” which would allow us to take advantage of many of the same exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation. If we rely on these exemptions, investors may find our common stock less attractive, which could result in a less active trading market, if any, for our common stock and more volatility or a decline in our stock price.

We are a smaller reporting company, and we cannot be certain if the reduced disclosure requirements applicable to smaller reporting companies will make our common stock less attractive to investors.

We are currently a “smaller reporting company,” meaning that we are not an investment company, an asset-backed issuer, or a majority-owned subsidiary of a parent company that is not a smaller reporting company and the market value of our stock held by non-affiliates, or our public float, is less than \$250 million. In the event our public float increases, we will remain a smaller reporting company if we continue to have annual revenues of less than \$100 million during our most recently completed fiscal year and our public float is less than \$700 million. If we are still considered a smaller reporting company at such time as we cease being an “emerging growth company,” we will be required to provide additional disclosure in our SEC filings. However, similar to emerging growth companies, smaller reporting companies are able to provide simplified executive compensation disclosures in their filings; are exempt from the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that independent registered public accounting firms provide an attestation report on the effectiveness of internal control over financial reporting; and have certain other decreased disclosure obligations in their SEC filings, including, among other things, only being required to provide two years of audited financial statements in annual reports. Decreased disclosures in our SEC filings due to our status as a smaller reporting company may make it harder for investors to analyze our results of operations and financial prospects, and may cause some investors not to invest in or hold our stock.

Our principal stockholders and management have substantial control over us and could delay or prevent a change in corporate control.

As of June 16, 2023, KKR Phorm Investors L.P. (“Phorm”) beneficially owned approximately 38.5% of our outstanding common stock, and our executive officers and directors, together with holders of ten percent or more of our outstanding common stock and their respective affiliates, beneficially owned approximately 40.3% of our outstanding common stock. As a result, these stockholders, acting together, or Phorm individually, have the ability to significantly impact the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. In addition, these stockholders, acting together or Phorm individually, have the ability to significantly impact the management and affairs of our company. Pursuant to the terms of a stockholders agreement with Phorm (the “Phorm Stockholders Agreement”), Phorm has the right to nominate (i) a majority of the board so long as it beneficially owns at least 40% of our then-outstanding shares of common stock, (ii) 33% of the directors (rounded up to the nearest whole number) so long as it beneficially owns at least 20% but less than 40% of our then-outstanding shares of common stock, and (iii) 10% of the directors (rounded up to the nearest whole number) so long as it beneficially owns at least 10% but less than 20% of our then-outstanding shares of common stock. Further, pursuant to the Phorm Stockholders Agreement, so long as Phorm beneficially owns 20% or more of the outstanding shares of our common stock, we will take all necessary action to cause a director nominated by Phorm to serve as chair of our board of directors.

The interests of these stockholders may not be the same as or may even conflict with your interests. The concentration of ownership and Phorm’s rights under the Phorm Stockholders Agreement might decrease the market price of our common stock by:

- delaying, deferring, or preventing a change in control of the company, which could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company or our assets and might affect the prevailing market price of our common stock;
- impeding a merger, consolidation, takeover, or other business combination involving us; or
- discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of the company.

The significant concentration of stock ownership may also adversely affect the trading price of our common stock due to investors’ perception that conflicts of interest may exist or arise.

Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock into the public market, particularly sales by our directors, executive officers and principal stockholders, or the perception that these sales might occur in large quantities, could cause the market price of our common stock to decline. If our stockholders sell, or the market perceives that our stockholders intend to sell, a substantial amount of our common stock in the public market, the market price of our common stock could decline significantly.

If you are eligible to participate in the rights offering and do not exercise your subscription rights in full, your percentage ownership and voting rights in the Company will be diluted.

If you are eligible to participate in the rights offering because you were a stockholder of record as of 5:00 p.m., Eastern Daylight Time, on June 26, 2023 and you choose not to exercise your subscription rights, you will retain your current number of shares of our common stock. However, if other eligible stockholders fully exercise their basic subscription rights, exercise a greater proportion of their basic subscription rights than you exercise, or purchase shares in excess of their basic subscription rights in connection with the over-subscription privilege in the rights offering, the percentage of our common stock owned by these other stockholders will increase relative to your ownership percentage, and your voting and other rights in the Company will accordingly be diluted.

We could be subject to certain liquidated damages pursuant to the registration rights agreement we entered into with certain holders of our securities.

Pursuant to registration statements that were declared effective by the SEC on June 19, 2020, January 27, 2021, December 1, 2021, December 27, 2021, July 13, 2022, and May 1, 2023 (collectively, the “Resale Registration Statements”), we registered shares of our common stock for resale by the stockholders named therein. Pursuant to the registration rights agreements we entered into with certain holders of our securities, subject to certain exceptions, if (i) the Resale Registration Statements cease to remain continuously effective or such holders are otherwise not permitted to utilize the Resale Registration Statements to resell their registrable securities for a period of more than 15 consecutive trading days, or (ii) trading of our common stock is suspended or halted for more than three full, consecutive trading days, we could be subject to certain liquidated damages up to a maximum amount equal to the aggregate purchase price paid by the holders for their registrable securities.

If securities or industry analysts do not 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 will be influenced by the research and reports that industry or securities analysts publish about us or our business. We cannot assure you that brokerage firms will provide analyst coverage of our company in the future, or continue such coverage if started. In addition, investment banks may be less likely to agree to underwrite secondary offerings on our behalf than they might if we became a public reporting company by means of an underwritten initial public offering, because they may be less familiar with our company as a result of more limited coverage by analysts and the media, which could harm our ability to raise additional funding in the future. The failure to receive research coverage or support in the market for our shares will have an adverse effect on our ability to develop a liquid market for our common stock, which will negatively impact the trading price of our common stock.

If any of the analysts who cover us issue an adverse or misleading opinion regarding us or if our operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Anti-takeover provisions in our charter documents could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our management.

Provisions in our amended and restated certificate of incorporation and in our amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include a classified board of directors, a prohibition on actions by written consent of our stockholders, supermajority voting requirements to

amend certain provisions of our certificate of incorporation and bylaws, and the ability of our board of directors to issue preferred stock without stockholder approval. Although we believe these provisions collectively will provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove then-current management by making it more difficult for stockholders to replace members of the board of directors, which is responsible for appointing the members of management. In addition, we have opted out of the provisions of Section 203 of the Delaware General Corporation Law (“DGCL”), which generally prohibit 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. However, our amended and restated certificate of incorporation provides substantially the same limitations as are set forth in Section 203 but also provides that Phorm and its affiliates and any of their direct or indirect transferees and any group as to which such persons are a party do not constitute interested stockholders for purposes of this provision.

Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, and also provide that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, each of which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our bylaws provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware, or if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware, will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, stockholders, officers or other employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws (as either may be amended from time to time) or (iv) any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein and the claim not being one which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery or for which the Court of Chancery does not have subject matter jurisdiction. Our bylaws also provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States will be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and to have consented to these provisions of our bylaws. These exclusive-forum provisions may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. Stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. The Court of Chancery or a federal district court may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find either of these provisions of our bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could have a material adverse effect on our business, financial condition or results of operations.

We do not intend to pay dividends for the foreseeable future so any returns will be limited to changes in the value of our common stock.

We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. Any future determination about the payment of dividends will be made at the discretion of our board of directors and will depend upon our results of operations, cash flows and financial condition, operating and capital requirements, contractual restrictions, including any loan or debt financing

agreements, and such other factors as our board of directors deems relevant. As a result, stockholders must rely on sales of their common stock after price appreciation as the only way to realize any future gains on their investment, which may never occur.

Item 1B. Unresolved Staff Comments.

Not applicable

Item 2. Properties.

Our headquarters are located in Goleta, California, where we lease approximately 27,800 square feet of commercial space for research and development, engineering, testing and corporate offices. We also lease additional offices in the United States and internationally in Japan, China, Hong Kong, Taiwan and the Philippines. We believe that our facilities are suitable to meet our current needs.

Item 3. Legal Proceedings.

From time to time, we may become involved in litigation or other legal proceedings. We are not currently a party to any litigation or legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

On April 5, 2022, Joel Newman, an alleged holder of our common stock, filed a complaint in the Delaware Court of Chancery derivatively against our directors and KKR Phorm Investors L.P. (“Phorm”). On July 11, 2022, plaintiff filed an amended complaint. Among other things, the complaint alleges that the directors and Phorm (as an alleged controlling stockholder) breached their fiduciary duties, and that Phorm was unjustly enriched, because the terms of the November 5, 2021 private placement in which Phorm participated were allegedly unfairly favorable to Phorm. The directors have the right to advancement from us of expenses incurred defending the claims. The defendants moved to dismiss the complaint, and a hearing on the motion occurred on May 9, 2023. The Company is unable to estimate the potential loss or range of loss, if any, associated with this lawsuit.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information for Common Stock

Our common stock, par value \$0.0001 per share, began trading on the Nasdaq Capital Market on February 22, 2022 under the symbol “TGAN”. Prior to that date, our common stock traded on the OTC Market Group’s quotation system under the symbol “TGAN” from July 29, 2020 to February 21, 2022.

Holders of Record

As of June 20, 2023, there were 25 holders of record of our common stock. This figure does not reflect the beneficial ownership of shares held in street name.

Dividend Policy

We have not declared or paid any cash dividends on our capital stock since our inception. We intend to retain future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Payment of future cash dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs, the requirements and contractual restrictions of then-existing debt instruments, and other factors that our board of directors deems relevant.

Securities Authorized for Issuance under Equity Compensation Plans

Information about our equity compensation plans is incorporated herein by reference to Part III, Item 12 of this Report.

Recent Sales of Unregistered Securities; Use of Proceeds from Registered Securities

All unregistered sales of equity securities during the year ended March 31, 2023 were previously disclosed in our Quarterly Reports on Form 10-Q or our Current Reports on Form 8-K.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

We did not purchase any shares of our common stock or other securities during the quarter ended March 31, 2023.

Performance Graph

As a smaller reporting company, we are not required to provide a stock performance graph.

Item 6. [Reserved]

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our historical financial statements and the related notes thereto contained in this Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Report, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the sections titled “Note Regarding Forward-Looking Statements” and “Risk Factors” for a discussion of forward-looking statements and important factors that could cause actual results to

differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a pioneer, and a market and technology leader, in the wide-bandgap GaN power electronics field for high voltage power conversion applications. We deliver high quality and reliable GaN devices with high performance, while providing application design support to a growing customer base. Our GaN devices allow customers to design smaller, lighter and cooler power systems that create increased functional value in end products including smartphone power adapters, smartphone chargers, power supplies for datacenter servers and automotive electric vehicles, among other applications. We deploy our vertically integrated innovation model that leverages one of the industry's most experienced GaN engineering teams (with over 300 years of combined experience) at every development stage: device design, materials growth, device fabrication, packaging, circuits and application support. This approach, backed by one of the GaN power industry's largest intellectual property portfolios with access to over 1,000 world-wide patents, has yielded the industry's first automotive-grade AEC-Q101 and JEDEC qualified high voltage GaN FETs. Our innovations are designed to move power electronics beyond the limitations of silicon and provide our customers with the potential to achieve higher efficiency (e.g., titanium-class performance in power supplies), higher power density and, in some designs, an overall lower system cost.

We received our first product order "in volume" (i.e., greater than ten thousand units) for our Gen-2-based TO247 products in January 2018. We introduced our Gen-3 products in June 2018. Also in 2018, we were awarded a contract from the U.S. Navy to become a supplier for GaN epiwafer products for use by the U.S. Department of Defense. In the year ended March 31, 2022, we recognized \$8.0 million of perpetual licensing revenue from Nexperia related to Gen-5 and 900V technology development.

Since our inception, we have devoted substantial resources to the research and development of GaN power devices and the protection and enhancement of our intellectual property and have incurred significant operating losses. Our net loss was \$30.6 million and \$10.2 million for the years ended March 31, 2023 and 2022, respectively. As of March 31, 2023, our accumulated deficit was \$209.2 million. Substantially all of our operating losses have resulted from expenses incurred in connection with research and development activities and from general and administrative costs associated with our operations.

Our revenue for the year ended March 31, 2023 was \$16.5 million, of which \$8.0 million was from related parties. Our revenue for the year ended March 31, 2022 was \$24.1 million, of which \$12.1 million was from related parties. For each of the years ended March 31, 2023 and 2022, we had three customers that each accounted for more than ten percent of our revenue. Together, these customers accounted for 62.9% and 78.1% of our revenue during the years ended March 31, 2023 and 2022, respectively.

We expect to continue to incur significant expenses and operating losses for the foreseeable future. We expect our expenses will increase in connection with our ongoing activities as we:

- add sales and field applications personnel and incur related expenses to support operational growth;
- increase activity directly related to promoting our products to increase revenue;
- acquire additional MOCVD reactor capacity; and
- add financial accounting and management systems and select personnel and incur additional legal and accounting expense as we operate as a public company.

Recent Developments

We recently announced a rights offering for our common stock, which we expect to commence soon after the filing of this Report. If the rights offering is fully subscribed, we intend to raise up to \$15 million through the rights

offering, to be used for working capital and general corporate purposes. We are also pursuing conventional asset-based debt financing initiatives that, if consummated and together with proceeds from a fully subscribed rights offering, would provide us with working capital well into the fiscal year ending March 31, 2025. There can be no assurance that the rights offering will be fully subscribed or that we will be successful in closing the debt financing. If the rights offering is completed but not fully subscribed or the debt financing is not closed, or does not raise the amounts we hope for, our forecasted financial runway will be significantly reduced. If we are unable to secure any additional funding through these financing initiatives, we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to fund our operations into the second half of September 2023. If we do not obtain any other financing, we would need to cease operations, liquidate our assets, and may seek the protection of applicable bankruptcy laws. Because all of our liabilities are senior to our common stock in our capital structure, any such liquidation or bankruptcy would likely result in the complete loss of your investment in our common stock. Therefore, trading in our securities is highly speculative and poses substantial risks. All statements contained herein regarding our future strategy, operations and potential growth are contingent upon our ability to obtain additional financing through the successful execution of the rights offering and debt financing initiatives, or otherwise.

Assuming we are able to raise sufficient funds through the the rights offering and debt financing initiatives we are pursuing, we intend to initiate, in our second fiscal quarter ending September 30, 2023, a strategic review of opportunities to enhance stockholder value which may include, among other things, strategic partnerships with third parties with equity or debt investment, a sale of the Company or certain of our assets, strategic licensing or other financing alternatives. Our strategic plans are not yet finalized and are subject to market conditions and other uncertainties. There can be no assurance that any strategic review will be successful, that it will result in a transaction on terms acceptable to us or our stockholders, or at all, or will result in increased stockholder value.

Private Placements

On August 13, 2021, we sold 1,000,000 shares of common stock in a private placement at a purchase price of \$5.00 per share, with aggregate gross proceeds of \$5.0 million (before deducting legal costs of \$22 thousand).

On November 5, 2021 and November 9, 2021, we sold an aggregate of 6,600,000 shares of common stock in a private placement at a purchase price of \$5.00 per share, with aggregate gross proceeds of \$33.0 million (before deducting placement agent fees and other offering expenses, which were an aggregate of \$0.8 million). Pursuant to the purchase agreements entered into with the investors in this offering, each investor had the right (but not the obligation), subject to the satisfaction of customary closing conditions, to purchase additional shares of common stock at a purchase price of \$5.00 per share. On June 2, 2022, in connection with the investors' exercise of such purchase rights, we sold 3,199,999 shares of common stock in a private placement for aggregate gross proceeds of \$16.0 million (before deducting placement agent fees and other offering expenses, which were an aggregate of \$0.3 million).

On December 7, 2021, we sold 1,673,152 shares of common stock in a private placement at a purchase price of \$7.71 per share, with aggregate gross proceeds of \$12.9 million (before deducting a finder's fee and other offering expenses, which were an aggregate of \$0.3 million).

On April 3, 2023, we sold 500,000 shares of common stock in a private placement at a purchase price of \$4.00 per share, with aggregate gross proceeds of \$2.0 million.

In connection with the private placements disclosed above, we issued warrants as follows:

Issuance Date	Shares of Common Stock Underlying Warrants	Exercise Price Per Share
8/13/2021	209,000	\$6.00
11/5/2021	958,334	\$6.00
11/9/2021	416,667	\$6.00
12/7/2021	348,649	\$9.25
6/2/2022	666,668	\$6.00
4/3/2023	250,001	\$5.00

On February 10, 2022, we issued finders' warrants to purchase 20,233 shares of common stock at an exercise price of \$8.48 per share.

Further, on April 3, 2023, we entered into warrant exercise inducement offer letters with certain holders of then-outstanding warrants (the "Exercising Holders"), pursuant to which the Exercising Holders agreed to exercise, for cash, warrants to purchase, in the aggregate, 1,815,848 shares of common stock, in exchange for our agreement to (i) lower the exercise price of such warrants to \$4.00 per share and (ii) issue new warrants to the Exercising Holders to purchase, in the aggregate, up to 2,269,810 shares of common stock at an exercise price of \$5.00 per share. We received aggregate gross proceeds of approximately \$7.3 million from the exercise of warrants by the Exercising Holders.

The outstanding warrants are exercisable by paying cash or by cashless exercise. The exercise price of the warrants is subject to standard anti-dilution adjustment in the case of stock dividends or other distributions on shares of common stock or any other equity or equity equivalent securities payable in shares of common stock, stock splits, stock combinations, reclassifications or similar events affecting our common stock, and also, subject to limitations, upon any distribution of assets, including cash, stock or other property to our stockholders. The exercise price of the warrants is not subject to "price-based" anti-dilution adjustment. We have determined that these warrants are subject to equity treatment because warrant holders have no right to demand cash settlement and there are no unusual anti-dilution rights.

Key Factors Affecting Our Performance

A number of industry factors affect our business, including:

Overall Demand for Products and Applications Using GaN Devices. Our potential for growth depends significantly on the adoption of GaN materials and devices in the power markets and GaN epiwafer material products in the RF markets, the expansion of the use of GaN devices in infrastructure, IT, datacenter, industrial, automotive and consumer applications such as fast charger/adaptor and gaming power supplies, and our ability to win new designs for these applications. Demand also fluctuates based on various market cycles, fluctuations in supply chains, trade and tariff terms, and the competitive dynamics in each of the respective markets. These uncertainties make demand difficult to forecast for us and our customers. Some of our customers have experienced delays in their internal development programs and design cycles with our GaN products due to the effects of the COVID-19 pandemic, which led to postponements of their orders of our products and postponements of determinations that our products will be used in their designs for new products under development, with corresponding delays in their market introduction and potentially our revenues.

Intense and Constantly Evolving Competitive Environment. Competition in the industries we serve is intense. Many companies have made significant investments in product development and production equipment. To remain competitive, market participants must continuously increase product performance, reduce costs and develop

improved ways to serve their customers. To address these competitive pressures, we have invested in research and development activities to support new product development, lower product costs and deliver higher levels of performance to differentiate our products in the market.

Governmental Trade and Regulatory Conditions. Our potential for growth, as with most multinational companies, depends on a balanced and stable trade, political, economic and regulatory environment among the countries where we do business. Changes in trade policy such as the imposition of tariffs or export bans to specific customers or countries could reduce or limit demand for our products in certain markets.

Technological Innovation and Advancement. Innovations and advancements in materials and power technologies continue to expand the potential commercial application for our products. However, new technologies or standards could emerge or improvements could be made to existing technologies that could reduce or limit the demand for our products.

Intellectual Property Issues. We rely on patented and non-patented proprietary information relating to product development, manufacturing capabilities and other core competencies of our business. Protection of intellectual property is critical. Therefore, filing additional patent applications, entering into confidentiality and non-disclosure agreements, and other security measures are important. While we have a strong patent portfolio comprising access to over 1,000 worldwide patents (directly owned or licensed) and there is no actual or, to our knowledge, threatened litigation against us for patent-related matters, litigation or threatened litigation is a common method to effectively enforce or protect intellectual property rights. Such action may be initiated by or against us and could require significant management time and be costly.

Components of Results of Operations

Revenue

We currently generate revenue from (1) commercial product sales and service contracts, (2) government contracts for research and development and (3) licensing contracts. Products are sold to distributors and end-users in various sectors such as, the gaming, industrial, IT, and consumer products industries.

Cost of Goods Sold

Cost of goods sold consists of (1) direct product costs incurred for the raw materials and manufacturing services for our products, (2) fixed product costs primarily relating to production, manufacturing and personnel and (3) depreciation expenses consisting primarily of expenses related to our fixed assets. In future periods, we expect our cost of goods sold attributable to direct product costs to increase proportionately with increases in revenue, and our cost of goods sold attributable to fixed product costs to remain substantially flat or moderately increase in connection with increases in revenue.

Operating Expenses

Research and Development. Research and development expenses consist primarily of compensation and related costs for personnel, including stock-based compensation and employee benefits as well as costs associated with design, fabrication, packaging and testing of GaN devices. In addition, research and development expenses include depreciation expenses related to our fixed assets. We expense research and development expenses as incurred. As we continue to invest in developing our technology for new products, we expect research and development expenses in future periods to remain flat or moderately increase in absolute dollars and decrease as a percentage of revenue.

Sales and Marketing. Sales and marketing expenses consist primarily of compensation and related costs for personnel, including stock-based compensation and employee benefits, and associated travel costs. Sales and marketing expenses also include costs associated with our support of business development efforts with distributors, and costs related to trade shows and marketing programs. We expense sales and marketing expenses as incurred. As

we increase our sales and expand our sales force and our marketing organization, we expect sales and marketing expenses in future periods to increase in absolute dollars.

General and Administrative. General and administrative expenses consist primarily of compensation and related costs for personnel, including stock-based compensation, employee benefits and travel. In addition, general and administrative expenses include third-party consulting, legal, audit and accounting services, allocations of overhead costs, such as rent, facilities and information technology, and amortization of our intangible assets. We expect general and administrative expenses in future periods to increase in absolute dollars due to additional legal, accounting, insurance, investor relations and other costs associated with being a public company, as well as other costs associated with growing our business.

Interest Expense

Interest expense consists of interest associated with our revolving credit facility with Nexperia.

Equity Loss in Joint Venture

Equity loss in joint venture consists of expenditures to cover the losses associated with our 25% share ownership of GaNovation from August 2021 to April 9, 2023 and our former 49% share ownership of AFSW. Our share ownership of GaNovation increased to 32.5%, effective April 10, 2023. Accordingly, the potential magnitude of equity loss in joint venture may increase in the future based upon the level of operating expenses incurred by GaNovation, which wholly owns AFSW.

Changes in Fair Value of Promissory Note

Changes in the fair value of promissory note reflect valuation changes in the notes held by the Company.

Other Income, Net

Other income, net of other expenses, consists primarily of income generated from subleasing a portion of our research and development facility located in California and interest income.

Tax Expense

Tax expense consists primarily of income taxes in certain foreign and state jurisdictions in which we conduct business.

Results of Operations

Comparison of the Years Ended March 31, 2023 and 2022

The following table sets forth our consolidated statements of operations data for the periods indicated (*in thousands, except percentages*):

	Year Ended March 31,		Change	
	2023	2022	Amount	Percentage
Revenue, net	\$ 16,511	\$ 24,050	\$ (7,539)	(31.3) %
Cost of goods sold	17,461	12,530	4,931	39.4 %
Gross (loss) profit	(950)	11,520	(12,470)	(108.2) %
Operating expenses:				
Research and development	8,908	6,655	2,253	33.9 %
Sales and marketing	5,247	3,535	1,712	48.4 %
General and administrative	13,672	11,226	2,446	21.8 %
Total operating expenses	27,827	21,416	6,411	29.9 %
Loss from operations	(28,777)	(9,896)	(18,881)	190.8 %
Interest expense	730	792	(62)	(7.8) %
Loss in joint venture	2,724	3,971	(1,247)	(31.4) %
Changes in fair value of promissory note	—	(605)	605	(100.0) %
Other income, net	(1,633)	(3,819)	2,186	(57.2) %
Loss before tax expense	(30,598)	(10,235)	(20,363)	199.0 %
Tax expense	—	—	—	—
Net loss	\$ (30,598)	\$ (10,235)	\$ (20,363)	199.0 %

Revenue decreased \$7.5 million, or 31.3%, to \$16.5 million for the year ended March 31, 2023 from \$24.1 million for the year ended March 31, 2022. The decrease is due primarily to an \$8.0 million decrease in licensing revenue from Nexperia, combined with a smaller decrease in government contract revenue, partially offset by an increase in commercial product revenue, as compared to the same period in 2022. We currently do not expect further licensing revenue in fiscal 2024.

Cost of goods sold increased \$4.9 million, or 39.4%, to \$17.5 million for the year ended March 31, 2023 from \$12.5 million for the same period in 2022, due primarily to costs directly associated with increased commercial product and services sales and a \$2.8 million inventory write-off. The inventory write-offs resulted primarily from a decision to discontinue the evaluation of certain epiwafer inventory produced while bringing our reactors online following an internal risk assessment of using these epiwafer units in our manufacturing process, and in favor of allocating resources to current and future epiwafer production and expansion efforts.

Gross loss was \$(1.0) million for the year ended March 31, 2023 compared to a gross profit of \$11.5 million for the same period in 2022. Margin decreased 53.7% to a gross loss margin of (5.8)% for the year ended March 31, 2023 from a 47.9% gross profit margin for the same period in 2022. The decrease is due primarily to a (i) \$8.0 million decrease in licensing revenue from Nexperia and a (ii) \$2.8 million inventory write-off during the year ended March 31, 2023.

Research and development expense increased \$2.3 million, or 33.9%, to \$8.9 million for the year ended March 31, 2023 from \$6.7 million for the same period in 2022, due primarily to a reduction in the allocation of research and development costs to costs of goods sold in the amount of \$2.0 million as a result of the wind down of certain government contracts.

Sales and marketing expense increased \$1.7 million, or 48.4%, to \$5.2 million for the year ended March 31, 2023 from \$3.5 million for the same period in 2022, due primarily to increases in payroll and stock compensation costs of \$1.2 million.

General and administrative expense increased \$2.4 million, or 21.8%, to \$13.7 million for the year ended March 31, 2023 from \$11.2 million for the same period in 2022, due primarily to a \$1.6 million increase in costs related to payroll and stock-based compensation expenses and \$1.0 million increase in legal costs, primarily offset by a \$0.5 million decrease in government cost. Expenses recognized outside of cost of goods sold and in general and administrative expense were \$0.6 million and \$1.1 million, respectively, for the years ended March 31, 2023 and 2022.

Interest expense decreased \$0.1 million, associated with a reduction in interest related to the note payable to Yaskawa.

Loss in joint venture was \$2.7 million for the year ended March 31, 2023, compared with \$4.0 million for the same period in 2022 due to a reduction in our percentage ownership of the joint venture that owns AFSW.

There were no changes in the fair value of the promissory note for the year ended March 31, 2023 as the note was converted in October 2021. Changes in the fair value of the promissory note for the year ended March 31, 2022 was \$0.6 million.

Other income, net of other expenses, decreased \$2.2 million, or 57.2%, to \$1.6 million for the year ended March 31, 2023 from \$3.8 million for the same period in 2022, due primarily to the recognition of a \$1.5 million gain upon termination of our joint venture agreement with FSL and the gain on conversion of the promissory note in the prior year that did not reoccur in the current year.

Liquidity and Capital Resources

Our principal sources of liquidity have been cash generated by issuing stock and promissory notes and, more recently, revenue from operations. During the years ended March 31, 2023 and 2022, we raised gross proceeds of \$16.0 million and \$50.9 million, respectively, from the sale of common stock in private placements, and used \$26.5 million and \$19.7 million, respectively, of cash in operations.

As of March 31, 2023, we had cash and cash equivalents and restricted cash of \$16.0 million, other current assets of \$14.7 million and current liabilities of \$21.9 million (including an outstanding \$12.0 million revolving loan with Nexperia due April 4, 2023), resulting in working capital (including restricted cash) of \$8.8 million. In April 2023, we raised gross proceeds of \$7.3 million from the exercise of warrants and \$2.0 million from selling shares of our common stock in a private placement, but also used \$12.2 million of cash to repay our revolving loan with Nexperia when it matured on April 4, 2023.

On June 16, 2023, we announced that the independent Financing Committee of our board of directors has approved a rights offering available to all holders of record of our common stock as of 5:00 p.m., Eastern Daylight Time, on June 26, 2023. If the rights offering is fully subscribed, we intend to raise up to \$15 million through the rights offering, to be used for working capital and general corporate purposes. The rights offering will be made through the distribution to all holders of record of common stock as of the record date of non-transferable subscription rights to purchase a fraction of a share of common stock, at a ratio to be determined, for every one right held at a subscription price to be determined prior to the commencement of the rights offering. We intend to commence the rights offering soon after the filing of this Report. We are also pursuing conventional asset-based debt financing initiatives that, if consummated and together with proceeds from a fully subscribed rights offering, are expected to provide us with working capital well into the year ending March 31, 2025.

The rights offering and the conventional asset-based debt financing initiatives are referred to herein as the “Short-term Financing Arrangements.” If we are unable to secure additional funding through the Short-term Financing Arrangements, we believe that our existing cash and cash equivalents and forecasted revenue will be sufficient to

fund our operations into the second half of September 2023. If the rights offering or the debt financing are completed but not fully subscribed, it will significantly reduce our forecasted financial runway. The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. However, considering our working capital, historical losses from operations, and future expected losses, there is substantial doubt about the Company's ability to continue as a going concern for the next twelve months from the issuance of these financial statements.

In response to the factors noted above, management plans to raise additional working capital to fund operations through the issuance of stock to investors (including through the rights offering as noted above and in "Note 19 - Subsequent Events" to the Consolidated Financial Statements), issuance of debt (including through our asset-based debt financing initiatives), and/or license of intellectual property. However, there is no assurance that we will be successful in raising additional capital. If we do not obtain any other financing, we would need to cease operations, liquidate our assets, and may seek the protection of applicable bankruptcy laws. Because all of liabilities are senior to our common stock in our capital structure, any such liquidation or bankruptcy would likely result in the complete loss of your investment in our common stock. Therefore, trading in our securities is highly speculative and poses substantial risks.

Our ability to sustain operations is dependent, in the short term, on successfully executing the Short-term Financing Arrangements and, in the longer term, on our ability to successfully market and sell our products and our ability to raise capital through additional financings until we are able to achieve profitability with positive cash flows. To the extent sufficient financing is not available, we may not be able to, or may be delayed in, developing our offerings and meeting our obligations. We will continue to evaluate our projected expenditures relative to our available cash and to evaluate financing alternatives in order to satisfy our working capital and other cash requirements.

Assuming we are able to raise sufficient funds through the Short-term Financing Arrangements, we intend to initiate, in our second fiscal quarter ending September 30, 2023, a strategic review of opportunities to enhance stockholder value which may include, among other things, strategic partnerships with third parties with equity or debt investment, a sale of the Company or certain of our assets, strategic licensing, or other financing alternatives. Our strategic plans are not yet finalized and are subject to market conditions and other uncertainties. There can be no assurance that any strategic review will be successful, that it will result in a transaction on terms acceptable to us or our stockholders, or at all, or will result in increased stockholder value.

If we are unable to successfully execute our strategic review, or enter into a transaction on acceptable terms, we may be required to delay, limit or terminate our operations or restructure our liabilities, including potentially under the protection of applicable bankruptcy laws.

The accompanying consolidated financial statements do not reflect any adjustments that might result from the outcome of the above uncertainties.

Our future capital requirements will depend on many factors including our revenue growth rate, billing frequency, the current global macroeconomic environment, the timing and extent of spending to support further sales and marketing and research and development efforts, and our obligations to GaNovation. The current global macroeconomic environment may make it more difficult or preclude us from raising additional capital, increase our costs of capital and otherwise adversely affect our business, results of operations, financial condition and liquidity. We may in the future enter into arrangements to acquire or invest in complementary businesses, services and technologies, including intellectual property rights. We will require additional equity or debt financing, which we may not be able to raise on terms acceptable to us or at all. If we are unable to raise additional capital when required, our business, results of operations and financial condition would be materially and adversely affected, or we may need to cease operations altogether.

Cash Flows

The following table shows a summary of our cash flows for the periods presented (*in thousands*):

	Year Ended March 31,		Change
	2023	2022	
Net cash (used in) provided by:			
Operating activities	\$ (26,509)	\$ (19,736)	\$ (6,773)
Investing activities	(10,146)	(5,121)	(5,025)
Financing activities	18,834	49,498	(30,664)
(Decrease) increase in cash and cash equivalents, excluding effect of foreign exchange rate changes	\$ (17,821)	\$ 24,641	\$ (42,462)

Operating Activities

Net cash used in operating activities was \$26.5 million and \$19.7 million for the years ended March 31, 2023 and 2022, respectively. The increase of \$6.8 million was attributable primarily to a \$20.4 million increase in net loss, reduced mainly by a (i) \$8.0 million decrease in non-cash licensing revenue from a related party, (ii) \$2.9 million increase in the provision for inventories, (iii) \$1.2 million decrease in gain on promissory note conversion and (iv) \$1.4 million increase in accounts payable and accrued expense.

Investing Activities

Net cash used in investing activities was \$10.1 million and \$5.1 million for the years ended March 31, 2023 and 2022, respectively. The increase of \$5.0 million was attributable primarily to a \$6.3 million increase in advances and purchases of property and equipment, offset by a \$1.2 million decrease in investments in the joint venture.

Financing Activities

Net cash provided by financing activities was \$18.8 million and \$49.5 million for the years ended March 31, 2023 and 2022, respectively. The decrease of \$30.7 million was attributable to \$15.7 million in net proceeds from the sale of our common stock in private placements for the year ended March 31, 2023, compared to \$49.8 million in net proceeds from the sale of our common stock in private placements for the same period of 2022.

Critical Accounting Policies and Estimates

The accompanying discussion and analysis of our financial condition and results of operations is based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. We believe certain of our accounting policies are critical to understanding our financial position and results of operations. Our significant accounting policies and estimates are discussed in the “Notes to Consolidated Financial Statements, Note 2 — Summary of Significant Accounting Policies.” For the year ended March 31, 2023, we adopted ASU 2016-02, *Leases (Topic 842)* as noted below.

Revenue Recognition

We derive revenue primarily through the sale and delivery of promised goods and services to distributors and end-users in various sectors such as, but not limited to, the gaming, industrial, IT, and consumer products industries. We disaggregate revenue based on the following contract types:

- **Commercial Product and Service** contracts, including contracts for sales of high-powered GaN-based products manufactured utilizing our proprietary and patented epiwafer technology and wafer fabrication and other assembly processes, sales of GaN epiwafers for the RF and power markets, and the provision of epiwafer growth services and products to our strategic partners.
- **Government** contracts for research and development related services and activities.

- **Licensing** contracts, including licenses to use our patented proprietary technology.

We follow a five-step approach for recognizing revenue, consisting of the following: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when, or as, the entity satisfies a performance obligation. Sales and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. Incidental items that are immaterial in the context of the contract are recognized as expense. We do not have any significant financing components associated with our revenue contracts, as payment is received at or shortly after the point of sale.

Commercial Product and Service contracts

Sales prices are documented in executed customer or distributor agreements and subsequent individual invoices. Performance obligations consist of the delivery of promised products or services, each of which are considered to be separate although the invoices typically do not include more than one performance obligation. For invoices with multiple performance obligations, revenue is allocated to each performance obligation based on its relative standalone selling price.

Performance obligations are satisfied, and revenue is recognized when control of a good or service promised in a contract is transferred to a customer. Control is obtained when a customer has the ability to direct the use of and obtain substantially all of the remaining benefits from that good or service at a point in time, and revenue is recognized in an amount that reflects the consideration we expect to be entitled to receive in exchange for those products or services.

Revenue is recognized over time if the customer receives the benefits as we perform work, the customer controls the asset as it is being produced (continuous transfer of control), or the product being produced for the customer has no alternative use and we have a contractual right to payment for performance to date. We recognize revenue ratably over time under the cooperation and development agreement with Yaskawa.

A portion of our products are sold through distributors. Distributors stock inventory and sell our products to their own customer base. We recognize revenue upon shipment of our products to our distributors.

Master supply or distributor agreements are in place with many of our customers and contain terms and conditions including, but not limited to, payment, delivery, incentives and warranty. These agreements sometimes require minimum purchase commitments. If a master supply, distributor or other similar agreement is not in place with a customer, we consider a purchase order, which is governed by our standard terms and conditions, to be the contract governing the relationship with that customer.

Pricing terms are negotiated independently on a stand-alone basis. Revenue is measured based on the amount of net consideration to which we expect to be entitled to receive in exchange for products or services.

Government contracts

Government contract revenue is principally generated under research and development contracts with agencies of the U.S. government. These contracts may include cost-plus fixed fee and fixed price terms. All payments received for work performed on contracts with agencies of the U.S. government are subject to adjustment upon audit by the Defense Contract Audit Agency. Performance obligations under government contracts are satisfied and revenue is recognized over time because the customer receives the benefits as we perform work, the customer controls the asset as it is being produced (continuous transfer of control), and we have a contractual right to payment for performance to date. Expenses recognized outside of cost of goods sold and in general and administrative expense were \$0.6 million and \$1.1 million for the years ended March 31, 2023 and 2022, respectively.

Licensing contracts

From time to time, we may enter into licensing arrangements related to our intellectual property. Revenue from licensing arrangements is recognized when earned and estimable. The timing of revenue recognition is dependent on the terms of each license agreement. Generally, we will recognize non-refundable upfront licensing fees related to patent licenses immediately upon receipt of the funds if we have no significant future obligations to perform under the arrangement.

In the case that the arrangement gives rise to variable consideration in the form of milestone and royalty payments, we evaluate the royalties to determine if they qualify for the sales and usage-based royalty exception. In the case of our royalty arrangement with Nexperia, we determined the royalties qualify for the sales and usage-based royalty exception, as the license of intellectual property is the predominant item to which the royalty relates and revenue is recognized upon the subsequent sale occurring. The variable amounts are recognized at the net consideration we expect to receive upon satisfaction of contractually agreed upon development targets and sales volumes.

Disaggregation of Revenue from Contracts with Customers

Revenue disaggregated by contract type is as follows:

	Year Ended March 31,	
	2023	2022
Commercial product and service (1)	\$ 14,898	\$ 12,173
Government (2)	1,613	3,877
Licensing (3)	—	8,000
Revenue, net	\$ 16,511	\$ 24,050

(1) We recognized service revenue under commercial product and service contracts of \$2.1 million and \$2.2 million for the years ended March 31, 2023 and 2022, respectively.

In December 2020, we entered into a cooperation and development agreement with Yaskawa Electric Corporation (“Yaskawa”), a related party, pursuant to which Yaskawa agreed to provide \$4.0 million over approximately three years to fund development activities related to industrial power conversion applications, with an initial focus on servo motor drive applications. Subsequently, amendments to the contract were executed in April and November 2022 which increased the scope of the project and deliverables. We evaluated and concluded that the deliverables are the same and nature of the services to be provided to Yaskawa will be consistent over the period of approximately three years.

Accordingly, we recognized \$1.2 million and \$1.5 million in revenue for the years ended March 31, 2023 and 2022, respectively, which includes \$0.3 million and \$0.4 million recorded for services rendered but not billed for the years ended March 31, 2023 and 2022, respectively.

(2) Government revenue was primarily derived from contracts with the U.S. Navy. The contract’s expiration dates were initially March and June 2022, but such dates were subsequently extended to June and December 2022, respectively. We received new government authorized rates for billing purposes which allowed for retroactive application since inception. The cumulative impact of this rate change as of March 31, 2022 was \$0.4 million.

(3) As part of the multi-element commercial arrangement executed with Nexperia on April 4, 2018 (see Note 3 - Nexperia Arrangement), we agreed to grant Nexperia the perpetual exclusive right to use our existing Gen-3 manufacturing process technology. License fees are received upon satisfaction of contractual milestones and recognized upon delivery of the perpetual license or transferred technology without any remaining performance obligations. We recognized \$8.0 million of perpetual licensing revenue for the year ended March 31, 2022. No perpetual licensing revenue was recognized for the year ended March 31, 2023, and we do not expect licensing revenue in fiscal year 2024.

Accounting Standard Adopted

Effective April 1, 2022, we adopted ASU 2016-02, *Leases (Topic 842)*, which requires lessees to recognize a right-of-use (“ROU”) asset and a lease liability on their balance sheet for all leases, including operating leases, with a term of greater than 12 months. In July 2018, the Financial Accounting Standards Board (“FASB”) issued ASU 2018-11, which adds a transition option permitting entities to apply the provisions of the new standard at its adoption date instead of the earliest comparative period presented in the consolidated financial statements. Under this transition option, comparative reporting would not be required, and the provisions of the standard would be applied prospectively to leases in effect at the date of adoption. We elected to use the optional transition method provided by ASU 2018-11. We also elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward our ASC 840 assessment regarding definition of a lease, lease classification, and initial direct costs. The following practical expedients were applied implementing this standard.

- We did not reassess whether any expired or existing contracts are, or contain, leases. Additionally, we did not reassess for lease classifications of expired or existing leases, or initial direct costs for any existing leases.
- We elected the short-term lease exception, which allows us to account for leases with a lease term of twelve months or less similar to existing operating leases. The cost of these leases is disclosed, but is not recognized in the ROU asset and lease liability balances. Consistent with ASC 842 requirements, leases that are one month or less are not included in the disclosures.

Operating lease ROU assets represent our right to use the underlying asset during the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at lease commencement based on the present value of the remaining lease payments using incremental borrowing rate at the lease commencement date. We chose the practical expedients and reviewed the lease and non-lease components for any impairment or otherwise, subsequently determining that no cumulative-effect adjustment to equity was necessary as part of implementing the modified retrospective approach for its adoption of ASC 842. Operating lease expense, which is comprised of amortization of the ROU asset and the interest accreted on the lease liability, is recognized on a straight-line basis over the lease term and is recorded in lease expense in the consolidated statements of income.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the JOBS Act. The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to either early adopt or delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period under the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

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

As a “smaller reporting company,” we are not required to provide the information required by this Item.

Item 8. Financial Statements and Supplementary Data.

Transphorm, Inc.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Transphorm, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Transphorm, Inc. (the "Company") as of March 31, 2023 and 2022, the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity (deficit) and cash flows for each of the years in the two year period ended March 31, 2023, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of March 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the two year period ended March 31, 2023, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph – Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 1, the Company has incurred and continues to incur significant net losses and negative cash flows from operations, and needs to raise significant additional funds to meet its obligations and to sustain its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regards to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

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

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

/s/ Marcum LLP

We have served as the Company's auditor since 2019.

Chicago, IL
June 28, 2023

Transphorm, Inc.
Consolidated Balance Sheets
(in thousands, except share and per share data)

	March 31,	
	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 15,527	\$ 33,435
Restricted cash	500	500
Accounts receivable, net, including \$2.9 million and \$1.2 million from related parties as of March 31, 2023 and 2022, respectively (Note 18)	4,396	2,558
Inventory	8,406	6,330
Prepaid expenses and other current assets	1,859	1,971
Total current assets	30,688	44,794
Property and equipment, net	7,890	1,649
Operating lease right-of-use assets	3,033	—
Goodwill	1,079	1,180
Intangible assets, net	321	617
Investment in joint venture	715	143
Other assets	726	263
Total assets	\$ 44,452	\$ 48,646
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable and accrued expenses, including \$1.1 million and \$0.9 million from related parties as of March 31, 2023 and 2022, respectively (Note 18)	\$ 7,895	\$ 3,588
Deferred revenue	—	346
Accrued interest	180	180
Accrued payroll and benefits	1,458	1,171
Operating lease liabilities	404	—
Revolving credit facility	12,000	—
Total current liabilities	21,937	5,285
Revolving credit facility, net of current portion	—	12,000
Operating lease liabilities, net of current portion	2,670	—
Other liabilities	230	—
Total liabilities	24,837	17,285
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock, \$0.0001 par value; 750,000,000 shares authorized as of March 31, 2023 and 2022, and 57,047,013 and 53,379,307 shares issued and outstanding as of March 31, 2023 and 2022, respectively	6	5
Additional paid-in capital	230,272	211,190
Accumulated deficit	(209,236)	(178,638)
Accumulated other comprehensive loss	(1,427)	(1,196)
Total stockholders' equity	19,615	31,361
Total liabilities and stockholders' equity	\$ 44,452	\$ 48,646

See accompanying notes to consolidated financial statements.

Transphorm, Inc.
Consolidated Statements of Operations
(in thousands, except share and per share data)

	Year Ended March 31,	
	2023	2022
Revenue, net, including related parties (Note 18)	\$ 16,511	\$ 24,050
Cost of goods sold	17,461	12,530
Gross (loss) profit	(950)	11,520
Operating expenses:		
Research and development	8,908	6,655
Sales and marketing	5,247	3,535
General and administrative	13,672	11,226
Total operating expenses	27,827	21,416
Loss from operations	(28,777)	(9,896)
Interest expense	730	792
Loss in joint venture	2,724	3,971
Changes in fair value of promissory note	—	(605)
Other income, net	(1,633)	(3,819)
Loss before tax expense	(30,598)	(10,235)
Tax expense	—	—
Net loss	\$ (30,598)	\$ (10,235)
Net loss per share - basic and diluted	\$ (0.54)	\$ (0.22)
Weighted average common shares outstanding - basic and diluted	56,227,007	46,056,331

See accompanying notes to consolidated financial statements.

Transphorm, Inc.
Consolidated Statements of Comprehensive Loss
(in thousands)

	Year Ended March 31,	
	2023	2022
Net loss	\$ (30,598)	\$ (10,235)
Other comprehensive loss, net of tax:		
Foreign currency translation adjustments	(231)	(339)
Other comprehensive loss, net of tax	(231)	(339)
Comprehensive loss	\$ (30,829)	\$ (10,574)

See accompanying notes to consolidated financial statements.

Transphorm, Inc.
Consolidated Statements of Changes in Stockholders' Equity (Deficit)
(in thousands, except share data)

	Common Stock		Additional Paid- in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity (Deficit)
	Number of Shares	Amount				
Balance at March 31, 2021	40,531,996	\$ 4	\$ 144,201	\$ (168,403)	\$ (857)	\$ (25,055)
Stock options exercised	52,799	—	221	—	—	221
Restricted stock units vested	305,982	—	—	—	—	—
Restricted stock units surrendered due to net share settlement to satisfy employee tax liability	(97,249)	—	(768)	—	—	(768)
Stock warrants exercised	95,528	—	272	—	—	272
Issuance of common stock (Note 13)	9,370,251	1	50,272	—	—	50,273
Conversion of promissory note (Note 13)	3,120,000	—	14,378	—	—	14,378
Stock-based compensation	—	—	2,614	—	—	2,614
Other comprehensive loss	—	—	—	—	(339)	(339)
Net loss	—	—	—	(10,235)	—	(10,235)
Balance at March 31, 2022	53,379,307	\$ 5	\$ 211,190	\$ (178,638)	\$ (1,196)	\$ 31,361
Stock options exercised	168,326	—	710	—	—	710
Restricted stock units vested	403,157	—	—	—	—	—
Restricted stock units surrendered due to net share settlement to satisfy employee tax liability	(103,776)	—	(546)	—	—	(546)
Issuance of common stock (Note 13)	3,199,999	1	15,719	—	—	15,720
Stock-based compensation	—	—	3,199	—	—	3,199
Other comprehensive loss	—	—	—	—	(231)	(231)
Net loss	—	—	—	(30,598)	—	(30,598)
Balance at March 31, 2023	57,047,013	\$ 6	\$ 230,272	\$ (209,236)	\$ (1,427)	\$ 19,615

See accompanying notes to consolidated financial statements.

Transphorm, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended March 31,	
	2023	2022
Cash flows from operating activities:		
Net loss	\$ (30,598)	\$ (10,235)
Adjustments to reconcile net loss to net cash used in operating activities:		
Provision for inventory	3,127	196
Depreciation and amortization	968	843
Amortization of right-of-use assets	566	—
Perpetual licensing revenue from a related party (Note 18)	—	(8,000)
Stock-based compensation	3,199	2,614
Interest cost	—	107
Gain on promissory note conversion	—	(1,222)
Gain on sale of equipment	(106)	—
Loss in joint venture	2,724	2,516
Changes in fair value of derivative instruments	(14)	—
Changes in fair value of promissory note	—	(605)
Changes in operating assets and liabilities:		
Accounts receivable	(1,838)	(940)
Inventory	(5,203)	(4,303)
Prepaid expenses and other current assets	125	(518)
Other assets	(463)	11
Accounts payable, accrued expenses, and other liabilities	1,586	198
Deferred revenue	(346)	(159)
Accrued payroll and benefits	288	(239)
Operating lease liabilities	(524)	—
Net cash used in operating activities	(26,509)	(19,736)
Cash flows from investing activities:		
Purchases of property and equipment	(6,936)	(595)
Proceeds from sale of equipment	111	—
Investment in joint venture	(3,321)	(4,526)
Net cash used in investing activities	(10,146)	(5,121)
Cash flows from financing activities:		
Proceeds from stock option exercise	710	221
Proceeds from issuance of common stock	16,000	50,900
Cost associated with issuance of common stock	(280)	(1,127)
Payment for taxes related to net share settlement of restricted stock units	(546)	(768)
Proceeds from exercise of warrants	2,950	272
Net cash provided by financing activities	18,834	49,498
Effect of foreign exchange rate changes on cash, cash equivalents and restricted cash	(87)	(206)
Net (decrease) increase in cash, cash equivalents and restricted cash	(17,908)	24,435
Cash, cash equivalents and restricted cash at beginning of year	33,935	9,500
Cash, cash equivalents and restricted cash at end of year	\$ 16,027	\$ 33,935

Reconciliation of cash, cash equivalents, and restricted cash to the consolidated balance sheets			
Cash and cash equivalents		15,527	33,435
Restricted cash		500	500
Cash, cash equivalents and restricted cash at end of period		\$ 16,027	\$ 33,935
Supplemental disclosures of cash flow information:			
Interest expense paid	\$	730	\$ 685
Supplemental non-cash investing activity:			
Equipment purchases	\$	—	\$ 250
Supplemental non-cash financing activity:			
Issuance of shares in connection with a service contract	\$	—	\$ 500
Operating lease right-of-use asset obtained in exchange for operating lease liabilities	\$	3,598	\$ —
Development loan reduction related to perpetual licensing revenue	\$	—	\$ 8,000
Conversion of promissory note	\$	—	\$ 15,600

See accompanying notes to consolidated financial statements.

Transphorm, Inc.
Notes to Consolidated Financial Statements

Note 1 - Business

The original Transphorm, Inc., now named Transphorm Technology, Inc. (“Transphorm Technology”), a wholly owned subsidiary of Parent (as defined below), was founded in 2007 to develop gallium nitride (“GaN”) semiconductor components used in power conversion.

On February 12, 2020 (the “Closing Date”), Peninsula Acquisition Corporation (“Peninsula”), a shell company, consummated the Agreement and Plan of Merger and Reorganization (the “Merger Agreement”) dated February 12, 2020, by and among Peninsula, Peninsula Acquisition Sub, Inc., a Delaware corporation and wholly owned subsidiary of Peninsula (“Merger Sub”), and Transphorm Technology. Pursuant to the terms of the Merger Agreement, Merger Sub merged with and into Transphorm Technology, with Transphorm Technology surviving the merger as a wholly-owned subsidiary of Peninsula (the “Merger”). On the Closing Date, Peninsula changed its name to Transphorm, Inc. (“Parent”).

Throughout these notes, “the Company,” “Transphorm,” “we,” “us” and “our” refer to Parent and its direct and indirect wholly-owned subsidiaries. Transphorm Technology and its subsidiaries hold all material assets and conduct all business activities and operations of the Company. Transphorm Technology’s activities to date have been primarily performing research and development, establishing manufacturing infrastructure, market sampling, product launch, hiring personnel, and raising capital to support and expand these activities. Transphorm Japan, Inc. (“TPJ”) was established in Japan in February 2014 to secure the Company’s production capacity and establish a direct presence in Asian markets. Transphorm Aizu, Inc. (“Transphorm Aizu”) was established in Japan to manage the financial transactions around Aizu Fujitsu Semiconductor Wafer Solution Limited (“AFSW”), the wafer fabrication facility located in Aizu Wakamatsu, Japan that is owned by GaNovation, the joint venture company in which the Company has a non-controlling interest. Transphorm Japan Epi, Inc. (“TJE”) was established in Japan in 2019 to enable the operational capacity of the MOCVD reactors held in Aizu.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. However, considering the Company’s working capital (including restricted cash) of \$8.8 million as of March 31, 2023, the Company’s historical losses from operations (during the year ended March 31, 2023, the Company used \$26.5 million in cash from operations), and the future expected losses, there is substantial doubt about the Company’s ability to continue as a going concern for the next twelve months from the issuance of these financial statements. In April 2023, the Company raised gross proceeds of \$7.3 million from the exercise of warrants and \$2.0 million from selling shares of our common stock in a private placement, but also used \$12.2 million of cash to repay our revolving loan with Nexperia when it matured on April 4, 2023, and as such did not alleviate the substantial doubt about the Company’s ability to continue as a going concern for the next twelve months from the issuance of these financial statements.

In response to the factors noted above, management intends to raise additional working capital to fund operations through the issuance of stock to investors (including in the form of a rights offering as noted in “Note 19 - Subsequent Events” to the Consolidated Financial Statements), issuance of debt (including through the Company’s asset-based debt financing initiatives), and/or license of intellectual property. However, there is no assurance that the Company will be successful in raising additional capital. If the Company is unable to secure additional funding, the Company believes that its existing cash and cash equivalents and forecasted revenue will be sufficient to fund its operations into the second half of September 2023. If the Company does not obtain any other financing, the Company would need to cease operations, liquidate its assets, and may seek the protection of applicable bankruptcy laws.

The Company’s ability to sustain operations is dependent on its ability to successfully market and sell its products and its ability to raise capital through additional financings until it is able to achieve profitability with positive cash

flows. To the extent sufficient financing is not available, the Company may not be able to, or may be delayed in, developing its offerings and meeting its obligations. The Company will continue to evaluate its projected expenditures relative to its available cash and evaluate financing alternatives in order to satisfy its working capital and other cash requirements. The accompanying consolidated financial statements do not reflect any adjustments that might result from the outcome of these uncertainties.

Note 2 - Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Parent and its wholly-owned subsidiaries, Transphorm Technology, TPJ, Transphorm Aizu and TJE. Upon consolidation, all significant intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Management bases its estimates and assumptions on historical experience, knowledge of current conditions, and its belief of what could occur in the future, given available information. Actual results could differ from those estimates, and such differences could be material to the consolidated financial statements. Estimates are used for, but not limited to, the determinations of fair value of stock awards and promissory notes, accrual of expenses, revenue recognition, allowance for doubtful accounts, inventory reserve, and useful lives for property and equipment.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly-liquid investments with original maturities of 90 days or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist principally of bank deposits and money market funds. Restricted cash of \$0.6 million as of March 31, 2023 and 2022 consists of a \$0.5 million letter of credit held for purchases from a vendor in current assets and \$0.1 million of long-term deposit in other assets.

Foreign Currency Risk and Hedging

The Company is exposed to foreign currency risk due to its operations in Japan (Yen). Assets and liabilities of the operations are re-measured into U.S. currency at exchange rates in effect at the balance sheet dates through the consolidated statements of comprehensive loss. Gains or losses resulting from foreign currency transactions are re-measured using the rates on the dates on which those elements are recognized during the period and are included in other income or expense in the consolidated statements of operations. Changes in the value of our cash balance due to fluctuations in foreign exchange rate are presented on the consolidated statements of cash flows as effect of foreign exchange rate changes on cash, cash equivalents and restricted cash. As of March 31, 2023 and 2022, the Company had foreign cash and cash equivalents of \$0.2 million and \$0.1 million, respectively, which represented 1.0% and 0.2%, respectively, of total cash and cash equivalents.

Concentrations of Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents. The majority of the Company's cash, cash equivalents, and restricted cash are held with one major financial institution, which exposes the Company to credit risk in the event of default by the financial institution holding its cash. Substantially all cash amounts on deposit with major financial institutions exceed Federal Deposit Insurance Corporation insured limits. Risks associated with cash holdings in excess of insured limits are mitigated by banking with high-quality institutions. The Company's investment policy restricts investments to high-quality investments and limits the amounts invested with any one issuer, industry or geographic area. To date,

the Company has not experienced any significant losses on its cash and cash equivalents. The Company periodically evaluates the relative credit standing of these financial institutions.

The Company is subject to risks common in the power conversion components industry, including, but not limited to, technological obsolescence, dependence on key personnel, market acceptance of its products, the successful protection of its proprietary technologies, compliance with government regulations, and the possibility of not being able to obtain additional financing when needed.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive loss. Other comprehensive loss includes the impact of foreign currency translation adjustments.

Accounts Receivable

Accounts receivable are analyzed and allowances for uncollectible accounts are recorded, as required. Provisions for uncollectible accounts, if any, are recorded as bad debt expense and included in general and administrative expenses in the accompanying consolidated statements of operations. The process for determining the appropriate level of allowances for doubtful accounts involves judgment, and the Company considers such factors as the age of the underlying receivables, historical and projected collection trends, the composition of outstanding receivables, current economic conditions and regulatory changes. An account is fully reserved when reasonable collection efforts have been unsuccessful and it is probable that the receivable will not be recovered. No provision for doubtful accounts was recorded for the years ended March 31, 2023 or 2022 as substantially all of the accounts receivables were expected to be collected subsequently.

Inventory

Inventories are stated at the lower of cost or estimated net realizable value. Standard cost is generally computed based on actual cost on a first-in, first-out basis and is adjusted on a periodic basis. Standard cost includes the cost of raw materials, internal labor, overhead (including depreciation) and costs for foundry and packaging for offshore assembly providers. Standard cost is based on the normal utilization and yield of installed factory capacity, which are inputs that require management's judgement in determining. Cost associated with underutilization of capacity and yield is expensed as incurred. Inventory held at consignment locations is included in our finished goods inventory.

The Company performs periodic reviews of inventory items to identify excess and obsolete inventories on hand by comparing on-hand balances to anticipated usage using recent historical activity as well as anticipated or forecasted demand. If estimates of customer demand diminish further or market conditions become less favorable than those projected by the Company, additional inventory carrying value adjustments may be required. The Company maintains an inventory reserve for obsolete inventory and generally makes inventory value adjustments against the inventory reserve.

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation is determined using the straight-line method over the estimated useful lives of the respective assets, generally ranging from three to seven years. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the related lease term. Depreciation for equipment commences once it is placed in service, and depreciation for buildings and leasehold improvements commences once they are ready for their intended use. The Company expenses maintenance and repair costs that do not extend the life of the asset as they are incurred.

The Company evaluates the carrying amount of its property and equipment whenever events or changes in circumstances indicate that the assets may not be recoverable. An impairment loss would be recognized when

estimated future cash flows expected to result from the use of an asset or asset group and its eventual disposition are less than the carrying amount of the asset or asset group. To date, there have been no such impairment losses.

Goodwill

Goodwill arose for the acquisition of a business in February 2014 based in Japan and was accounted for as the purchase of a business. Goodwill generated from business combinations and deemed to have indefinite lives are not subject to amortization and instead are tested for impairment at least annually unless certain events occur or circumstances change. Goodwill represents the excess of the purchase price over the fair value of the net assets and other identifiable intangible assets acquired. The Company tests for goodwill impairment annually, on March 31, or earlier if events or changes in circumstances indicate goodwill might possibly be impaired. Impairment exists when the carrying value of the goodwill exceeds its implied fair value. An impairment loss would be recognized in an amount equal to that excess as a charge to operations in the consolidated statements of operations. For the years ended March 31, 2023 and 2022, no impairment charge was recorded related to goodwill.

Intangible Assets

Intangible assets that are not considered to have an indefinite useful life are amortized over their estimated useful lives, which generally range from three to ten years. Each reporting period, the Company evaluates the estimated remaining useful lives of intangible assets and whether events or changes in circumstances warrant a revision to the remaining periods of amortization.

If it is determined that the carrying values might not be recoverable based upon the existence of one or more indicators of impairment, the Company performs a test for recoverability using various methodologies, such as the income approach or cost approach, to determine the fair value of intangible assets depending upon the nature of the assets. If assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds their respective fair values. For the years ended March 31, 2023 and 2022, no impairment charges were recorded related to intangible assets.

Revenue Recognition

The Company derives its revenues primarily through the sale and delivery of promised goods and services to distributors and end-users in various sectors such as, but not limited to, the gaming, industrial, IT, and consumer products industries. The Company disaggregates revenue based on the following contract types:

- **Commercial product and service** contracts, including contracts for sales of high-powered GaN-based products manufactured utilizing the Company's proprietary and patented epiwafer technology and wafer fabrication and other assembly processes, sales of GaN epiwafers for the radio frequency and power markets, and the provision of epiwafer growth services and products to the Company's strategic partners.
- **Government** contracts for research and development related services and activities.
- **Licensing** contracts, including licenses to use the Company's patented proprietary technology.

The Company follows a five-step approach for recognizing revenue, consisting of the following: (1) identifying the contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when, or as, the entity satisfies a performance obligation. Sales and other taxes the Company collects concurrent with revenue-producing activities are excluded from revenue. Incidental items that are immaterial in the context of the contract are recognized as expense. The Company does not have any significant financing components associated with its revenue contracts, as payment is received within one year.

Commercial Product and Service Contracts

Sales prices are documented in executed customer or distributor agreements and subsequent individual invoices. Performance obligations consist of the delivery of promised products or services, each of which are considered to be separate although the invoices typically do not include more than one performance obligation. For invoices with multiple performance obligations, revenue is allocated to each performance obligation based on its relative standalone selling price.

Performance obligations are satisfied, and revenue is recognized when control of a good or service promised in a contract is transferred to a customer. Control is obtained when a customer has the ability to direct the use of and obtain substantially all of the remaining benefits from that good or service at a point in time, and revenue is recognized in an amount that reflects the consideration the Company expects to be entitled to receive in exchange for those products or services.

Revenue is recognized over time if the customer receives the benefits as the Company performs services, if the customer controls the asset as it is being produced (continuous transfer of control), or if the product being produced for the customer has no alternative use and the Company has a contractual right to payment for performance to date. The Company recognizes revenue ratably over time under the cooperation and development agreement with Yaskawa Electric Corporation (“Yaskawa”), a related party through share ownership.

A portion of the Company’s products are sold through distributors. Distributors stock inventory and sell the Company’s products to their own customer base. The Company recognizes revenue upon shipment of its products to its distributors.

Master supply or distributor agreements are in place with many of the Company's customers and contain terms and conditions including, but not limited to, payment, delivery, incentives and warranty. These agreements sometimes require minimum purchase commitments. If a master supply, distributor or other similar agreement is not in place with a customer, the Company considers a purchase order, which is governed by the Company’s standard terms and conditions, to be the contract governing the relationship with that customer.

Pricing terms are negotiated independently on a stand-alone basis. Revenue is measured based on the amount of net consideration to which the Company expects to be entitled to receive in exchange for products or services.

Government contracts

Government contract revenue is principally generated under research and development contracts with agencies of the U.S. government. These contracts may include cost-plus fixed fee and fixed price terms. All payments received for work performed on contracts with agencies of the U.S. government are subject to adjustment upon audit by the Defense Contract Audit Agency. Performance obligations under government contracts are satisfied and revenue is recognized over time because the customer receives the benefits as the Company performs work, the customer controls the asset as it is being produced (continuous transfer of control), and the Company has a contractual right to payment for performance to date.

Licensing contracts

From time to time, the Company may enter into licensing arrangements related to its intellectual property. Revenue from licensing arrangements is recognized when earned and estimable. The timing of revenue recognition is dependent on the terms of each license agreement. Generally, the Company will recognize non-refundable upfront licensing fees related to patent licenses immediately upon receipt of the funds if the Company has no significant future obligations to perform under the arrangement.

In the case that the arrangement gives rise to variable consideration in the form of milestone and royalty payments, the Company evaluates the royalties to determine if they qualify for the sales and usage-based royalty exception. In the case of the Company’s royalty arrangement with Nexperia, the Company determined the royalties qualify for the sales and usage-based royalty exception, as the license of intellectual property is the predominant item to which the royalty relates and revenue is recognized upon the subsequent sale occurring. The variable amounts are recognized

at the net consideration the Company expects to receive upon satisfaction of contractually agreed upon development targets and sales volumes.

Research and Development

The Company is a party to research grant contracts with the U.S. government for which the Company is reimbursed for specified costs incurred for its research projects. These projects include energy saving initiatives for which the U.S. government offers reimbursement funds. Such reimbursements are recorded as an offset to research and development expenses when the related qualified research and development expenses are incurred. Reimbursable costs are recognized in the same period the costs are incurred up to the limit of approved funding amounts on qualified expenses. Grant reimbursement of \$0.6 million and \$0.3 million was recorded as an offset to research and development expense for the years ended March 31, 2023 and 2022, respectively.

Stock-Based Compensation

All share-based payments, including grants of stock options and restricted stock units (“RSUs”), are measured at the fair value of the share-based awards on the grant date and expense is recognized over their respective vesting periods, which is generally one to four years. The estimated fair value of stock options at the grant date is determined using the Black-Scholes-Merton pricing model, and the RSUs are measured using the fair market value of the stock price at grant date. The Company recognizes the fair value of share-based payments as compensation expense for all expected-to-vest stock-based awards over the vesting period of the award using the straight-line attribution or graded vesting method provided that the amount of compensation cost recognized at any date is no less than the portion of the grant-date fair value of the award that is vested at that date.

The Black-Scholes-Merton option pricing model requires the following assumptions:

- Expected volatility - The Company utilizes the historical volatility of representative public companies to determine its expected volatility, as the trading history of the Company’s common stock is limited.
- Forfeitures - The Company adopted ASU 2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting and has elected to account for forfeitures as they occur and therefore, stock-based compensation expense has been calculated based on actual forfeitures in the statements of operations, rather than our previous approach which was net of estimated forfeitures.
- Expected dividend yield - The Company has not issued any common stock dividends; therefore, a dividend yield of zero was used.
- Risk-free interest rate - The Company bases the risk-free interest rate used in the Black-Scholes-Merton option pricing model on the implied yield currently available on United States Treasury zero-coupon issues with an equivalent expected term.
- Expected Term - The expected term of stock options represents the period that the Company’s stock options are expected to be outstanding. The Company generally uses the simplified method to calculate the expected term for employee grants as the Company has limited historical exercise data or alternative information to reasonably estimate an expected term assumption. The simplified method assumes that all options will be exercised midway between the weighted average vesting date and the contractual term of the option.

Changes in the deemed fair value of the common stock, the underlying assumptions in the calculations, the number of options granted or the terms of such options, the treatment of tax benefits, and other changes may result in significant differences in the amounts or timing of the compensation expense recognized.

Income (Loss) Per Share

Basic income (loss) per share is calculated by dividing net income (loss) applicable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted income (loss) per share is calculated by dividing the net loss attributable to common stockholders by the sum of the weighted average number of common shares outstanding plus potential dilutive common shares outstanding during the period. Potential dilutive securities, comprised of stock warrants, restricted stock units and stock options, are not reflected in diluted income (loss) per share because such shares are anti-dilutive. Dilutive impact of potential common shares resulting from common stock equivalents is determined by applying the treasury stock method.

For the year ended March 31, 2023, there were 7,049,192 shares, consisting of 2,909,204 stock options, 816,022 restricted stock units and 3,323,966 stock warrants, that were not included in the computation of diluted loss per share because their effect would be anti-dilutive. For the year ended March 31, 2022, there were 6,491,081 shares, consisting of 2,879,008 stock options, 954,775 restricted stock units and 2,657,298 stock warrants, that were not included in the computation of diluted loss per share because their effect would be anti-dilutive.

Fair Value Measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The carrying values of the Company's financial instruments such as cash equivalents, accounts receivable, revolving credit facility, accounts payable and accrued liabilities approximate fair values due to the short-term nature of these items. The fair value of the foreign currency forward and option contracts are discussed in Note 15.

Income Taxes

The Company accounts for income taxes in accordance with Accounting Standards Codification ("ASC") 740, *Income Taxes* ("ASC 740"). ASC 740 prescribes the use of the liability method. Deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted statutory tax rates in effect at the balance sheet date. The Company records a valuation allowance to reduce its deferred tax assets when uncertainty regarding their realizability exists.

Equity Method Investments

The Company uses the equity method to account for investments in entities that it does not control, but in which it has the ability to exercise significant influence over operating and financial policies. The Company's proportionate share of the net income or loss of these companies is included in consolidated net loss. Judgments regarding the level of influence over each equity method investment include consideration of key factors such as the Company's ownership interest, representation on the board of directors or other management body and participation in policy-making decisions.

Segment Reporting

The Company's operations and its financial performance is evaluated on a consolidated basis by the chief operating decision maker. The Company's chief operating decision maker is the Parent's Chief Executive Officer. Accordingly, the Company considers all of its operations to be aggregated in one reportable operating segment. For the year ended March 31, 2023 and 2022, total revenue was \$16.5 million, all from U.S. operations. For the year ended March 31, 2022, total revenue was \$24.1 million, of which \$23.4 million was from U.S. operations and \$0.7 million was from Japan operations.

Accounting Standard Adopted

The Company adopted ASU 2016-02, *Leases (Topic 842)* effective April 1, 2022, pursuant to ASU 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities* which deferred the effective date of the standard for smaller reporting companies. The standard requires lessees to recognize a right-of-use (“ROU”) asset and a lease liability on their balance sheet for all leases, including operating leases, with a term of greater than 12 months. In July 2018, the Financial Accounting Standards Board (“FASB”) issued ASU 2018-11, which adds a transition option permitting entities to apply the provisions of the new standard at its adoption date instead of the earliest comparative period presented in the consolidated financial statements. Under this transition option, comparative reporting would not be required, and the provisions of the standard would be applied prospectively to leases in effect at the date of adoption. The Company elected to use the optional transition method provided by ASU 2018-11. The Company also elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed the Company to carry forward its ASC 840 assessment regarding definition of a lease, lease classification, and initial direct costs. The following practical expedients were applied implementing this standard.

- The Company did not reassess whether any expired or existing contracts are, or contain, leases. Additionally, the Company did not reassess for lease classifications of expired or existing leases, or initial direct costs for any existing leases.
- The Company elected the short-term lease exception, which allows the Company to account for leases with a lease term of twelve months or less similar to existing operating leases. The cost of these leases is disclosed, but is not recognized in the ROU asset and lease liability balances. Consistent with ASC 842 requirements, leases that are one month or less are not included in the disclosures.

Operating lease ROU assets represent the Company’s right to use the underlying asset during the lease term, and operating lease liabilities represent the Company’s obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at lease commencement based on the present value of the remaining lease payments using incremental borrowing rate at the lease commencement date. The Company chose the practical expedients and reviewed the lease and non-lease components for any impairment or otherwise, subsequently determining that no cumulative-effect adjustment to equity was necessary as part of implementing the modified retrospective approach for its adoption of ASC 842. Operating lease expense, which is comprised of amortization of the ROU asset and the interest accreted on the lease liability, is recognized on a straight-line basis over the lease term and is recorded in lease expense in the consolidated statements of operations.

Recently Issued Accounting Standards under Evaluation

Debt - In August 2020, the FASB issued ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity’s Own Equity (Subtopic 815-40), Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity*, to address the complexity in accounting for certain financial instruments with characteristics of liabilities and equity. Among other provisions, the amendments in this ASU significantly change the guidance on the issuer’s accounting for convertible instruments and the guidance on the derivative scope exception for contracts in an entity’s own equity such that fewer conversion features will require separate recognition, and fewer freestanding instruments, like warrants, will require liability treatment. ASU 2020-06 is effective for fiscal years beginning after December 15, 2021, excluding entities eligible to be smaller reporting companies as defined by the SEC. As the Company is a smaller reporting company, the ASU is effective for fiscal years beginning after December 15, 2023. The Company is currently evaluating the impact of this new standard on its consolidated financial statements and the adoption is not expected to have a significant impact on the consolidated financial statements.

Financial Instruments - In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments (“ASU 2016-13”)*. The standard changes the methodology for measuring credit losses on financial instruments and the timing of when such losses are recorded. ASU 2016-13 is effective for the Company’s 2024 fiscal year. Early adoption is permitted. The Company is currently evaluating the impact of this new standard on its consolidated financial statements and the adoption is not expected to have a significant impact on the consolidated financial statements.

Note 3 - Nexperia Arrangement

On April 4, 2018, the Company entered into a multi-element commercial arrangement with Nexperia B.V. (“Nexperia”), a related party through share ownership, including a development and license agreement, loan and security agreement and supply agreement, to obtain financing in exchange for the sale of equity instruments and performing certain technology and product development activities for Nexperia (collectively, the “Collaboration Arrangement”). Nexperia specializes in designing, manufacturing and selling a broad range of small discrete semiconductor devices that utilize components such as those manufactured by the Company. By entering into this Collaboration Arrangement, Nexperia gained access to technology that allows for the production of high power semiconductors for use in electric vehicles. Financing under the Collaboration Arrangement was comprised of the following elements:

- \$16.0 million of equity financing;
- \$9.0 million license fee for transfer of the Gen-3 manufacturing process;
- \$15.0 million of term loans, separated into tranches for pre-funded projects; and
- \$10.0 million revolving loan, secured against certain of the Company’s U.S. patents not relating to MOCVD or epiwafer technology.

Loan and Security Agreement

The LSA, entered into on April 4, 2018, originally comprised term loans in an aggregate principal amount of \$15.0 million, separated into tranches for pre-funded projects, and a \$10.0 million revolving loan, each of which bore 6% annual interest. In June 2020, \$5.0 million of term loans was satisfied in full upon the Company’s transfer of its Gen-4 technology development to Nexperia, at which point the Company recognized \$5.0 million as licensing revenue.

On May 18, 2021, Amendment No. 6 to the LSA was executed to (1) extend the maturity date for the revolving loan to the earlier of April 4, 2023 and the occurrence of specified change of control events, (2) add Parent as a guarantor of Transphorm Technology’s obligations under the LSA, and (3) convert \$2.0 million of term loans into a revolving loan with the same terms and conditions as the existing revolving loan. See Note 11 - Debts.

On June 30, 2021, Amendment No. 7 to the LSA was executed to extend the maturity of the then-outstanding \$8.0 million term loan to July 16, 2021.

On July 16, 2021, Nexperia agreed that the \$8.0 million term loan was satisfied in full in connection with the Company transferring its Gen-5 and 900V technology developments to Nexperia, at which point the Company recognized \$8.0 million as perpetual licensing revenue.

Amended and Restated Development and License Agreement

The amended and restated development and license agreement (the “DLA”), entered into on May 18, 2021 provides that the Company will develop and transfer to Nexperia certain manufacturing process technologies to enable Nexperia to manufacture GaN-based products at Nexperia’s facilities. These technologies to be transferred included the Company’s Gen-3, Gen-4 (Tranche A), and Gen-5 and 900V (Tranche B) process technologies, but do not include the Company’s Epi Process Technology (as defined in the DLA). Nexperia also agreed to provide funding for the development of such technologies in return for limited exclusivities in automotive and other fields. Nexperia’s rights now include sale of products in the automotive field in Japan along with Transphorm’s rights for sale of products in the automotive field in Japan which remain in place. As per the original agreement, after April 2023, Nexperia’s exclusive rights for sale of products in the automotive field outside of Japan terminate. In addition,

the parties have clarified the ability of Nexperia’s customers to use products developed by Nexperia through exercise of its rights under this agreement.

Amended and Restated Supply Agreement

The amended and restated supply agreement (the “Supply Agreement”), entered into on May 18, 2021, sets forth the terms under which Nexperia may purchase epiwafers and processed wafers from the Company, and the Company may purchase processed wafers from Nexperia. The agreement specifies that Nexperia is the Company’s priority customer with respect to epiwafers manufactured by TJE and, accordingly, has preferred utilization of extra capacity, and further specifies procedures to address expansion of the Company’s epiwafer manufacturing capacity and Nexperia’s obligations with respect thereto. The term of the Supply Agreement was extended until December 31, 2025, with automatic one year renewals thereafter, and the Company may not terminate the Supply Agreement while the option agreement (described below) is in effect.

Strategic Cooperation Agreement

The strategic cooperation agreement, entered into on May 18, 2021, serves as a framework agreement that describes the numerous agreements between the parties and provides Nexperia with information rights and inspection rights with respect to the Company’s business.

Option Agreement

The option agreement, entered into on May 18, 2021, establishes the parameters pursuant to which Nexperia, in certain limited instances, is permitted to exercise an option (the “Option”) to acquire TJE, a Japanese subsidiary of the Company through which the Company is engaged in the development, manufacturing and sales of GaN-based epitaxial wafer products. In general, the Option is exercisable upon (1) certain acquisitions of securities or assets of the Company or its subsidiaries by a Competitor (as defined in the option agreement) that results in the Company, directly or indirectly, owning less than a majority of TJE, which acquisition is followed by any material breach (that is not cured within a specified time period) by the Company or a subsidiary of its obligations with respect to epiwafer supply to Nexperia under the Supply Agreement, or (2) the unilateral termination by the Company of the Supply Agreement. The option agreement also establishes the material terms, including price and timing, for the exercise of the Option by Nexperia. The Option terminates (1) if the Option is not exercised by Nexperia prior to the date on which the option agreement terminates, or (2) on the first to occur of (a) the termination of the option agreement upon written agreement of the parties, (b) the mutual termination or expiration of the Supply Agreement, or (c) the first to occur of (i) two years following the date on which the Company notifies Nexperia of epiwafer qualification of a second source and (ii) April 1, 2028.

In connection with the option agreement, the Company also amended and restated its existing intracompany license agreement with TJE to clarify Nexperia’s rights upon exercise of the Option.

Note 4 - Revenue

Revenue, net including related parties, disaggregated by contract type is as follows (*in thousands*):

	Year Ended March 31,	
	2023	2022
Commercial product and service (1)	\$ 14,898	12,173
Government (2)	1,613	3,877
Licensing (3)	—	8,000
Revenue, net	\$ 16,511	\$ 24,050

Revenues from related parties were \$8.0 million and \$12.1 million for the years ended March 31, 2023 and 2022, respectively.

(1) The Company recognized service revenue under commercial product and service contracts of \$2.1 million and \$2.2 million for the years ended March 31, 2023 and 2022, respectively.

In December 2020, the Company entered into a cooperation and development agreement with Yaskawa Electric Corporation (“Yaskawa”), a related party, pursuant to which Yaskawa agreed to provide \$4.0 million over approximately three years to fund development activities related to industrial power conversion applications, with an initial focus on servo motor drive applications. Subsequently, amendments to the contract were executed in April and November 2022 which increased the scope of the project and deliverables. The Company evaluated and concluded that the deliverables are the same and nature of the services to be provided to Yaskawa will be consistent over the period of approximately three years.

Accordingly, the Company recognized \$1.2 million and \$1.5 million in revenue for the years ended March 31, 2023 and 2022, respectively, which includes \$0.3 million and \$0.4 million recorded for services rendered but not billed for the years ended March 31, 2023 and 2022, respectively.

(2) Government revenue was primarily derived from contracts with the U.S. Navy. The contract’s expiration dates were initially March and June 2022, but such dates were subsequently extended to June and December 2022, respectively. The Company received new government authorized rates for billing purposes which allowed for retroactive application since inception. The cumulative impact of this rate change as of March 31, 2022 was \$0.4 million.

(3) As part of the multi-element commercial arrangement executed with Nexperia on April 4, 2018 (see Note 3 - Nexperia Arrangement), the Company agreed to grant Nexperia the perpetual exclusive right to use the Company’s existing Gen-3 manufacturing process technology. License fees are received upon satisfaction of contractual milestones and recognized upon delivery of the perpetual license or transferred technology without any remaining performance obligations. The Company recognized \$8.0 million of perpetual licensing revenue for the year ended March 31, 2022. No perpetual licensing revenue was recognized for the year ended March 31, 2023.

Note 5 - Concentration of Credit Risk and Significant Customers

The Company manages its credit risk associated with exposure to distributors and direct customers on outstanding accounts receivable through the application of credit approvals and other monitoring procedures. Credit sales, which are mainly on credit terms of 30 to 60 days, are only made to customers who meet the Company's credit standards, while sales to new customers or customers with low credit ratings are usually made on an advance payment basis. The Company closely monitors the aging of accounts receivable from its distributors and direct customers, and regularly reviews their financial positions, where available.

Significant customers are those that represent 10% or more of revenue or accounts receivable.

Total revenues, by percentage, from individual customers representing 10% or more of total revenues in the respective periods were as follows:

	Year Ended March 31,	
	2023	2022
Customer A	16.9%	42.4%
Customer B	*	16.1%
Customer C	21.7%	19.6%
Customer D	*	*
Customer E	24.3%	*

* Less than 10% of total

Accounts receivable, by percentage, from individual customers representing 10% or more of accounts receivable are set forth in the following table:

	As of March 31,	
	2023	2022
Customer A	26.2%	20.1%
Customer B	*	19.4%
Customer C	12.8%	38.8%
Customer D	10.6%	*
Customer E	38.2%	*

* Less than 10% of total

Customers A and E are related parties and Customer B is a government agency. JCP Capital Management, LLC Limited is a stockholder of Customer C. Refer to Note 9 - Investment in Joint Venture and Note 18 - Related Party Transactions.

Note 6 - Inventory

Inventory consists of the following as of the dates presented (*in thousands*):

	As of March 31,	
	2023	2022
Raw materials	\$ 5,167	\$ 2,412
Work in process	1,719	1,865
Sub-assembly	809	1,628
Finished goods	711	425
Total	\$ 8,406	\$ 6,330

The Company recorded inventory write-offs of \$2.8 million and \$0.2 million for the years ended March 31, 2023 and 2022, respectively. The inventory write-offs in the current year resulted primarily from a decision in the current period to discontinue the evaluation of certain epiwafer inventory produced while bringing the Company's reactors online following an internal risk assessment of using these epiwafer units in the Company's manufacturing process, and in favor of allocating the Company's resources to current and future epiwafer production and expansion efforts.

Note 7 - Property and Equipment

Property and equipment as of the dates presented consists of the following *(in thousands except years)*:

	March 31,		Estimated Useful Life <i>(in years)</i>
	2023	2022	
Machinery and equipment	11,124	\$ 15,255	5
Computer equipment and software	887	872	3
Furniture and fixtures	75	179	7
Leasehold improvements (1)	5,069	4,950	7
Construction in progress	6,446	384	
Property and equipment, gross	23,601	21,640	
Less: accumulated depreciation and amortization	(15,711)	(19,991)	
Property and equipment, net	\$ 7,890	\$ 1,649	

(1) Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the related remaining lease term.

The Company recorded depreciation and amortization expense related to property and equipment of \$0.7 million and \$0.5 million for the years ended March 31, 2023 and 2022, respectively.

The Company recognized \$0.1 million as gain on sale of equipment in Other income, net for the year ended March 31, 2023.

Note 8 - Intangible Assets

The carrying values of intangible assets as of the dates presented, respectively, consists of the following (*in thousands except years*):

	March 31, 2023					Estimated Useful Life (<i>in years</i>)
	Gross	Accumulated Amortization	Foreign Exchange Rate Changes	Net		
Patents	\$ 2,963	\$ (2,642)	\$ —	\$ 321	10	
Developed Technology - 150 V	560	(517)	(43)	—	6	
Developed Technology - 600 V	1,701	(1,570)	(131)	—	6	
Total	\$ 5,224	\$ (4,729)	\$ (174)	\$ 321		

	March 31, 2022					Estimated Useful Life (<i>in years</i>)
	Gross	Accumulated Amortization	Foreign Exchange Rate Changes	Net		
Patents	\$ 2,963	\$ (2,346)	\$ —	\$ 617	10	
Developed Technology - 150 V	560	(517)	(43)	—	6	
Developed Technology - 600 V	1,701	(1,570)	(131)	—	6	
Total	\$ 5,224	\$ (4,433)	\$ (174)	\$ 617		

The Company recorded amortization expenses related to intangible assets of \$0.3 million for each of the years ended March 31, 2023 and 2022.

Estimated future amortization expenses related to intangible assets as of March 31, 2023 were as follows (*in thousands*):

Year Ending March 31,	
2024	\$ 296
2025	25
Total	\$ 321

Note 9 - Investment in Joint Venture

Through July 31, 2021, the Company was party to a joint venture agreement (the “JVA”), by and among Aizu Fujitsu Semiconductor Limited, Fujitsu Semiconductor Limited (“FSL”), the Company and Transphorm Aizu for the ownership and operations of AFSW. Through July 31, 2021, the Company held a 49% interest in AFSW through Transphorm Aizu, the Company’s wholly-owned subsidiary established in Japan to manage the financial transactions around AFSW. Transphorm Aizu and FSL funded AFSW based on a mutually agreed funding schedule. Any outstanding balances were reviewed upon the conclusion of the JVA effective July 31, 2021 to assess unfunded commitment to joint venture liability. During the year ended March 31, 2022, the Company recognized a \$1.5 million gain, in other income, upon termination of the JVA and settlement of its obligation.

Prior to the conclusion of the JVA, on April 1, 2020, FSL exercised its put option under the JVA and notified the Company that FSL intended to exit the joint venture by selling its 51% interest in AFSW to the Company. In December 2020, the Company entered into a joint venture agreement with JCP Capital Management, LLC Limited (“JCP Capital”), the controlling party with a 75% ownership interest in the joint venture as of March 31, 2023, to

create GaNovation, a joint venture company in Singapore, to engage in the business of distribution, development and supply of GaN products and, upon approval of the regulatory authorities in Japan, to purchase FSL's and Transphorm's interests in AFSW. In July 2021, regulatory authorities in Japan approved GaNovation's purchase of 100% of the interests in AFSW from Transphorm and FSL. On July 20, 2021, Transphorm Aizu entered into a Share Purchase Agreement (the "Purchase Agreement") with GaNovation, pursuant to which GaNovation agreed to acquire Transphorm's 49% interest in AFSW from Transphorm Aizu for 1 Japanese Yen. The closing of the Purchase Agreement occurred on August 1, 2021. Immediately following the closing of the Purchase Agreement and other concurrent transactions between GaNovation and FSL, GaNovation owned 100% of AFSW and Transphorm held a 25% interest in GaNovation.

GaNovation (through AFSW) manufactures semiconductor products exclusively for its owners under manufacturing agreements at prices estimated to cover the cost of production. GaNovation was determined to be a variable interest entity as the equity at risk was not believed to be sufficient. GaNovation depends on its owners for any additional cash. The Company's known maximum exposure to loss approximated the carrying value of its investment balance, which included the financing. Potential future losses could be higher than the carrying amount of the Company's investment, as the Company is liable for other future operating costs or obligations of GaNovation. In addition, because the Company is currently committed to purchasing GaN wafers and production-related services from AFSW at pre-agreed pricing based upon the Company's second generation products, the Company may be required to purchase products at a higher cost for its newer generation products.

For the period from April 1, 2022 through March 31, 2023, JCP Capital was responsible for 75% of the funding obligations and losses of AFSW, while Transphorm was responsible for 25% of the funding obligations and losses of AFSW. Effective April 10, 2023, JCP Capital became responsible for 67.5% of the funding obligations and losses of AFSW, while the Company became responsible for 32.5% of the funding obligations and losses of AFSW, except that JCP Capital's total funding obligations or investment shall not exceed \$35 million and Transphorm's total funding obligations or investment shall not exceed \$12 million for the three-year period beginning August 1, 2021. As of March 31, 2023, the Company had provided \$5.3 million of this \$12.0 million commitment to GaNovation.

The Company's investment activities in GaNovation and AFSW for the periods presented are summarized below (*in thousands*):

	GaNovation / AFSW (1)	
	Year Ended March 31,	
	2023	2022
Beginning Balance	\$ 143	\$ (1,866)
Investment	3,320	4,526
Loss	(2,724)	(3,971)
Gain	—	1,455
Effect of exchange rate change	(24)	(1)
Ending Balance	\$ 715	\$ 143

(1) Includes transactions for AFSW during the four months ended July 30, 2021.

Summarized unaudited financial information of GaNovation and AFSW for the periods indicated are as follows (*in thousands*):

	GaNovation	
	March 31,	
	2023	2022
Current assets	\$ 4,572	\$ 4,259
Long-term assets	6,602	3,690
Other current liabilities	5,698	3,799
Due to controlling owner	2	(1)
Due to Transphorm	745	—
Net surplus	4,729	4,151

	GaNovation	GaNovation / AFSW (1)
	For the Year Ended March 31,	
	2023	2022
Sales	\$ 13,275	9,109
Gross loss	(9,174)	(9,359)
Net loss	(10,955)	(11,967)

As of March 31, 2023, the book value of the Company's investment in joint venture was \$0.7 million, which is net of a \$0.5 million basis difference originating primarily from foreign currency differences between the contributions the Company made under its funding obligations and the book value of the Company's share of the underlying net assets and liabilities of the joint venture.

(1) Includes sales of \$2.2 million, gross loss of \$(3.2) million and net loss of \$(4.3) million for AFSW during the four months ended July 30, 2021.

Note 10 - Leases

On April 1, 2022, the Company adopted ASU No. 2016-02, *Leases (Topic 842)*, using the optional transition method permitted by ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*. See Note 2 - Summary of Significant Accounting Policies.

The Company's operating leases are real estate leases which are comprised of the Company's headquarters and offices in the United States and internationally with remaining lease terms ranging from one to seven years as of March 31, 2023. Certain lease arrangements contain extension options and, as these extension options are generally considered reasonably certain of exercise, they are included in the lease term. As most of the Company's leases do not provide an explicit rate, the Company utilizes a 6.0% discount rate (based on the rate provided for under the LSA with Nexperia) at the commencement date to calculate the present value of lease payments.

In determining whether a contract contains a lease, the Company assesses whether an arrangement includes a lease at contract inception. Operating lease ROU assets and liabilities are recognized at commencement date and initially measured based on the present value of lease payments over the defined lease term. The opening balances for operating lease ROU assets and lease liabilities were \$3.5 million and \$3.5 million, respectively, as of the adoption date of April 1, 2022. The Company did not have any finance leases at March 31, 2023.

The following table presents the Company's ROU assets and lease liabilities as of the date indicated (*in thousands*):

	March 31, 2023
Operating lease ROU assets	\$ 3,033
Operating lease liabilities	\$ 404
Operating lease liabilities, net of current portion	2,670
Total operating lease liability	\$ 3,074

Weighted average remaining lease terms for the Company's operating leases were 5.6 years and the weighted average discount rate for the Company's operating leases was 6.0% as of March 31, 2023. Operating lease expense and short-term lease expense were \$0.7 million and \$0.1 million, respectively, for the year ended March 31, 2023. Cash paid, and included in cash flows from operating activities, for amounts included in the measurement of the lease liability for the Company's operating leases was \$0.7 million for the year ended March 31, 2023.

The following table presents the Company's remaining lease liabilities by maturity for the periods indicated (*in thousands*):

	March 31, 2023
2024	710
2025	674
2026	659
2027	616
2028	358
Thereafter	626
Lease payments	3,643
Less: interest	(569)
Present value of lease liability	\$ 3,074

As previously reported in the Company's Annual Report on Form 10-K for the year ended March 31, 2022 and under legacy lease accounting under ASC 840, future minimum operating lease commitments as of March 31, 2022 were as follows (*in thousands*):

	March 31, 2022
2023	\$ 681
2024	647
2025	156
Total	\$ 1,484

Note 11 - Debts

Development Loans and Revolving Credit Facility

See Note 3 - Nexperia Arrangement for details on the development term loans under the Loan and Security Agreement ("LSA"). As of March 31, 2023 and 2022, there were no term loans outstanding under the LSA.

The LSA also provided a \$10.0 million revolving loan (Tranche C Loan) that was scheduled to mature at the earlier of (i) April 3, 2021, and (ii) the date a Change of Control (as defined in the LSA) of the Company occurs. Interest payable by the Company accrues on the outstanding principal amount of the loans during such period at a rate of 6% per annum. The credit facility is secured against certain of the Company’s U.S. patents not relating to MOCVD or epiwafer technology. On March 1, 2021, the maturity of the Tranche C Loan of \$10.0 million was extended to May 18, 2021. On May 18, 2021, the maturity of the Tranche C Loan was extended to the earlier of April 4, 2023 and the occurrence of specified change of control events, and the \$2.0 million Tranche B-1 Loan was converted into a Tranche C-1 Loan (the “Tranche C Loans” together with the Tranche C Loan) with the same terms and conditions as the existing Tranche C Loan. See Note 3 - Nexperia Arrangement for further details.

As of March 31, 2023, there was \$12.0 million of principal related to the Tranche C Loans and \$0.2 million of accrued interest outstanding under the LSA. The Company recorded interest expense of \$0.7 million for each of the years ended March 31, 2023 and 2022.

As of March 31, 2023, the scheduled maturity, including accrued interest, of the Company’s borrowings under the revolving credit facility were as follows (*in thousands*):

Year Ending March 31,

2024	12,180
Total	\$ 12,180

On April 4, 2023, the Company paid to Nexperia the revolving loan balance in full including all accrued interest. Refer to Note 19 - Subsequent Events.

Promissory Note

In October 2017, the Company issued an unsecured subordinated convertible promissory note to Yaskawa (the “Yaskawa Note”) for \$15.0 million. The stated interest rate of the Yaskawa Note was 1.0%, and principal plus interest was due on the earlier of September 30, 2022, or the date of the occurrence of an Event of Default, Change of Control or an Initial Public Offering (all terms as defined in the Yaskawa Note). In February 2020, the Yaskawa Note was amended to be convertible at the option of the holder into a maximum of 3,076,171 shares of the Company’s common stock at a conversion price of \$5.12 per share.

Pursuant to ASC 825-10-15-4, the Company elected to apply the fair value option for the promissory note and recorded a \$0.6 million decrease in the fair value of the note for the year ended March 31, 2022 in other income. In connection with its promissory note obligation, the Company recorded interest expense of \$0.1 million for the year ended March 31, 2022. In accordance with the terms of the promissory note, interest was added to the principal balance and is reflected in the carrying value on the consolidated balance sheet.

On October 4, 2021, the Company entered into a Note Amendment and Conversion Agreement with Yaskawa to (i) reduce the conversion price of the Yaskawa Note from \$5.12 per share to \$5.00 per share and (ii) remove the limitation on the maximum number of shares of the Company’s common stock that could be issued upon conversion of the Yaskawa Note. Yaskawa simultaneously elected to convert the outstanding principal amount (plus accrued but unpaid interest) under the Yaskawa Note, which as of the effective date of the conversion totaled \$15.6 million, into an aggregate of 3,120,000 shares of common stock. The Company also issued to Yaskawa a warrant to purchase up to 650,000 shares of common stock at an exercise price of \$6.00 per share, with a term of three years. For the year ended March 31, 2022, the Company recognized a \$1.2 million gain in other income upon the conversion of the Yaskawa Note. For the year ended March 31, 2023, the Company did not record any fair value adjustments, interest, or gains related to the Yaskawa Note.

Note 12 - Commitments and Contingencies

Commitment with a Government Agency

In connection with a contract with a government agency, the Company entered into commitments to acquire equipment and services from vendors totaling \$7.4 million, all of which is reimbursable. Under this contract, which expired in December 2022, the Company made total purchases of \$7.4 million, all of which was reimbursed by the government agency as of March 31, 2023. During the year ended March 31, 2023, the Company made purchases of \$0.2 million and remaining accounts payable to the vendors was \$2 thousand as of March 31, 2023.

In September 2021, the Company was awarded a \$0.9 million contract with a \$0.5 million option by a government agency for delivering epiwafer technology and the expiration date of the contract is in August 2023. As of March 31, 2023, the Company had billed and received \$0.8 million, of which \$0.6 million was during the year ended March 31, 2023. As of March 31, 2023, the \$0.5 million option has not been exercised.

Cooperation Agreement

On December 30, 2022, and effective as of December 18, 2022, the Company entered into a cooperation agreement (the "Cooperation Agreement") with GaNext (Zhuhai) Technology Co., Ltd ("GaNext"). Among other things, the Cooperation Agreement calls for certain royalties including a royalty due to the Company in the event that GaNext utilizes epiwafers not provided by the Company (such royalties are based on time and volume with a minimum floor), and a royalty payable by the Company in the event the Company utilizes a certain future platform that may be developed independently by GaNext (such royalties are based on time and volume, and half the amount per wafer of the royalties GaNext would pay the Company when utilizing epiwafers not provided by the Company). As of March 31, 2023, no amounts have been billed by either party.

Contingencies

During the ordinary course of business, the Company may become a party to legal proceedings incidental to its business. The Company accrues contingent liabilities when it is probable that future expenditures will be made and such expenditures can be reasonably estimated. Legal cost is expensed as incurred.

On April 5, 2022, Joel Newman, an alleged holder of the Company's common stock, filed a complaint in the Delaware Court of Chancery derivatively against the Company's directors and KKR Phorm Investors L.P. ("Phorm"). On July 11, 2022, the plaintiff filed an amended complaint. Among other things, the complaint alleges that the directors and Phorm (as an alleged controlling stockholder) breached their fiduciary duties, and that Phorm was unjustly enriched, because the terms of the November 5, 2021 private placement in which Phorm participated were allegedly unfairly favorable to Phorm. The directors have the right to advancement from the Company of expenses incurred defending the claims. The defendants moved to dismiss the complaint, and a hearing on the motion occurred on May 9, 2023. The Company is unable to estimate the potential loss or range of loss, if any, associated with this lawsuit.

The Company is not aware of any material legal claims or assessments other than disclosed above. Although the results of litigation and claims are inherently unpredictable, management believes (in consultation with legal counsel) there was not at least a reasonable possibility that the Company had incurred a material loss with respect to any loss contingencies as of March 31, 2023 and through the issuance of these financial statements.

Indemnification

The Company from time to time enters into types of contracts that contingently require the Company to indemnify parties against third-party claims. These contracts primarily relate to: (1) real estate leases, under which the Company may be required to indemnify property owners for environmental and other liabilities and for other claims arising from the Company's use of the applicable premises; (2) agreements with the Company's officers, directors, and employees, under which the Company may be required to indemnify such persons from liabilities arising out of

their relationship; (3) indemnifying customers in the event of product failure; and (4) agreements with outside parties that use the Company's intellectual property, under which the Company may indemnify for copyright or patent infringement related specifically to the use of such intellectual property.

Historically, the Company has not been required to make payments under these obligations, and no liabilities have been recorded for these obligations in the Company's consolidated financial statements.

Note 13 - Stockholders' Equity

In April 2021, the Company issued 97,099 shares of common stock as payment of \$0.5 million pursuant to a one year internet advertising contract with SRAX, Inc.

In October 2021, the Company issued 3,120,000 shares of common stock to Yaskawa upon the conversion of \$15.6 million of outstanding principal and accrued interest under the Yaskawa Note.

On January 5, 2022, the Company issued 13,028 shares of common stock in connection with the cashless exercise of a warrant.

On January 10, 2022, the Company issued 82,500 shares of common stock in connection with the exercise of a warrant at an exercise price of \$3.30 per share.

As of March 31, 2023, 750,000,000 shares of common stock are authorized, of which 57,047,013 shares of common stock were issued and outstanding, and 5,000,000 shares of preferred stock are authorized, none of which were issued and outstanding. The Company's Board of Directors has the ability to designate the rights, preferences and privileges for the preferred stock.

Private Placements

On August 13, 2021, the Company sold 1,000,000 shares of common stock in a private placement offering at a purchase price of \$5.00 per share with gross proceeds of \$5.0 million (before deducting legal costs of \$22 thousand).

On November 5, 2021 and November 9, 2021, the Company sold an aggregate of 6,600,000 shares of common stock in a private placement offering at a purchase price of \$5.00 per share, with aggregate gross proceeds of \$33.0 million (before deducting placement agent fees and other offering expenses, which were an aggregate of \$0.8 million). Pursuant to the purchase agreements entered into with the investors in this offering, each investor had the right (but not the obligation), subject to the satisfaction of customary closing conditions, to purchase and acquire from the Company additional shares of common stock at a purchase price of \$5.00 per share. On June 2, 2022, in connection with the investors' exercise of such purchase rights, the Company sold 3,199,999 shares of common stock for aggregate gross proceeds of \$16.0 million (before deducting placement agent fees and other offering expenses, which were an aggregate of \$0.3 million).

On December 7, 2021, the Company sold 1,673,152 shares of common stock in a private placement offering at a purchase price of \$7.71 per share, with aggregate gross proceeds of \$12.9 million (before deducting a finder's fee and other offering expenses, which were an aggregate of \$0.3 million).

Common Stock

Common stockholders are entitled to dividends, as and when declared by the Company's Board of Directors, subject to the priority dividend rights of the holders of other classes of stock. There have been no dividends declared to date. The holder of each share of common stock is entitled to one vote.

The Company has reserved shares of common stock for future issuance as of the date presented as follows:

	March 31, 2023
Equity incentive plans	8,805,325
Common stock warrants	3,323,966
Total	12,129,291

Common Stock Warrants

On October 4, 2021, the Company issued warrants to purchase 650,000 shares of common stock at an exercise price of \$6.00 per share upon Yaskawa Note conversion.

In connection with the private placements discussed above, the Company issued warrants as follows.

Issuance Date	Shares of Common Stock Underlying Warrants	Exercise Price Per Share
8/13/2021	209,000	\$6.00
11/5/2021	958,334	\$6.00
11/9/2021	416,667	\$6.00
12/7/2021	348,649	\$9.25
6/2/2022	666,668	\$6.00

On February 10, 2022, the Company issued finders' warrants to purchase 20,233 shares of common stock at an exercise price of \$8.48 per share.

The outstanding warrants are exercisable by paying cash or by cashless exercise. The exercise price of the warrants is subject to standard anti-dilution adjustment in the case of stock dividends or other distributions on shares of common stock or any other equity or equity equivalent securities payable in shares of common stock, stock splits, stock combinations, reclassifications or similar events affecting our common stock, and also, subject to limitations, upon any distribution of assets, including cash, stock or other property to our stockholders. The exercise price of the warrants is not subject to "price-based" anti-dilution adjustment. We have determined that these warrants are subject to equity treatment because warrant holders have no right to demand cash settlement and there are no unusual anti-dilution rights.

The following warrants to purchase common stock were outstanding as of March 31, 2023:

Number of Shares	Exercise Price	Expiration Date
209,000	\$ 6.00	August 13, 2024
650,000	6.00	October 4, 2024
1,416,669	6.00	November 5, 2024
625,000	6.00	November 9, 2024
348,649	9.25	December 7, 2024
20,233	8.48	December 10, 2025
45,000	3.30	December 23, 2025
6,046	34.74	5 years after an initial public offering of the Company
3,369	54.41	5 years after an initial public offering of the Company
3,323,966		

Note 14 - Stock-Based Compensation

The 2020 Equity Incentive Plan (the “2020 Plan”) was approved by the Company’s stockholders on February 11, 2020. The 2020 Plan provides for the grant of incentive stock options, within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the “Code”), to employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units (“RSUs”), performance units, and performance shares to employees, directors and consultants.

Subject to the adjustment provisions of the 2020 Plan and the automatic annual increase described below, the maximum aggregate number of shares of common stock that may be issued under the 2020 Plan is 5,050,000 shares, which includes (i) 2,588,077 shares initially reserved for issuance, plus (ii) any shares of the Company’s common stock subject to issued and outstanding awards under the Transphorm Technology 2007 Stock Plan or the Transphorm Technology 2015 Equity Incentive Plan that, on or after February 12, 2020, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by the Company for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of shares to be added to the 2020 Plan pursuant to this clause (ii) equal to 2,461,923 shares.

Subject to the adjustment provisions of the 2020 Plan, the number of shares of common stock available for issuance under the 2020 Plan will also include an annual increase on the first day of each fiscal year beginning with the Company’s 2022 fiscal year and ending on (and including) the Company’s 2030 fiscal year, in an amount equal to the least of: (i) 5,000,000 shares of common stock; (ii) five percent (5%) of the outstanding shares of the Company’s common stock on the last day of the immediately preceding fiscal year; or (iii) such number of shares of common stock as the administrator of the 2020 Plan may determine. On April 1, 2022, 2,668,965 shares were added to the 2020 Plan pursuant to such automatic annual increase provision.

As of March 31, 2023, there were 2,909,204 stock options outstanding, 816,022 RSUs outstanding and 5,080,099 shares available for grant under the 2020 Plan.

Stock Options

The following table summarizes stock option activity and related information for the periods presented:

	Number of Options	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (in Years)	Aggregate Intrinsic Value (1) (in thousands)
Outstanding at March 31, 2022	2,879,008	\$ 4.88	6.02	\$ 6,747
Options granted	281,712	5.09		
Options exercised	(168,326)	4.22		
Options canceled	(83,190)	5.95		
Outstanding at March 31, 2023	2,909,204	4.90	5.50	126
Exercisable at March 31, 2023	2,302,834	4.66	4.63	125
Outstanding at March 31, 2021	2,543,125	\$ 4.82	6.05	\$ —
Options granted	528,077	6.31		
Options exercised	(52,799)	4.19		
Options canceled	(139,395)	9.52		
Outstanding at March 31, 2022	2,879,008	4.88	6.02	6,747
Exercisable at March 31, 2022	2,206,259	4.44	4.99	5,984

(1) Intrinsic value represents the excess of the fair value on the last day of the period (which was \$3.99 and \$7.07 as of March 31, 2023 and 2022, respectively) over the exercise price, multiplied by the number of options.

The assumptions used to value options granted to employees during the periods presented were as follows:

	Year Ended March 31,	
	2023	2022
Weighted average expected life (in years)	5.68	5.87
Risk-free interest rate	3.24% - 3.75%	1.08% - 1.32%
Expected volatility	44.60% - 47.20%	42.50% - 43.80%
Grant date fair market value	\$4.77 - \$5.24	\$6.34
Grant date fair value	\$2.21 - \$2.49	\$1.94 - \$3.32
Dividend yield	—%	—%

Option Modifications

During the year ended March 31, 2023, the Company recognized \$0.3 million in incremental compensation cost as a result of an amendment to a former employee's option agreements to allow for an extended post termination exercise period.

Restricted Stock Units

RSUs are grants of shares of the Company's common stock that vest in accordance with terms and conditions established by the administrator of the 2020 Plan. Subject to the provisions of the 2020 Plan, the administrator determines the terms and conditions of RSUs, including the vesting criteria.

The following table summarizes RSU activity and related information for the periods presented:

	Year Ended March 31,			
	2023		2022	
	Number of Shares	Weighted-Average Grant Date Fair Value Per Share	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
Balance at beginning of period	954,775	\$ 4.61	935,397	\$ 3.96
Granted	333,585	5.16	342,640	6.31
Vested	(403,157)	5.93	(305,982)	3.98
Canceled	(69,181)	5.66	(17,280)	3.98
Balance at end of period	816,022	5.74	954,775	4.61

Stock-Based Compensation

The accompanying consolidated statement of operations includes stock-based compensation expense for the periods presented as follows (*in thousands*):

	Year Ended March 31,	
	2023	2022
Cost of revenue	\$ 243	\$ 161
Research and development	528	552
Sales and marketing	268	190
General and administrative	2,160	1,711
Total	\$ 3,199	\$ 2,614

Unrecognized Stock-Based Compensation

Unrecognized stock-based compensation expense as of dates presented was as follows (*in thousands, except years*):

	March 31,			
	2023		2022	
	Unrecognized Expense	Average Expected Recognition Period (in years)	Unrecognized Expense	Average Expected Recognition Period (in years)
Stock options	\$ 1,325	1.05	\$ 1,413	2.11
Restricted stock units	1,813	1.34	2,576	1.57
Total	\$ 3,138	1.22	\$ 3,989	1.76

Note 15 - Fair Value Measurements

FASB ASC 820, *Fair Value Measurements and Disclosures*, establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

- Level 1 - Unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2 - Inputs (other than quoted prices included within Level 1) that are observable, unadjusted quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data of substantially the full term of the related assets or liabilities.
- Level 3 - Inputs reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Inputs are unobservable for the asset or liability. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Promissory Note

The Yaskawa promissory note was categorized as a Level 3 borrowing, measured and reported at fair value using a Monte Carlo simulation valuation model. The models can include assumptions related to the value of the notes that are based on the estimated timing and amounts of future rounds of financing, including the estimated timing of a change in control of the Company, and estimated market interest rates, which represent significant unobservable inputs. Assumptions used are (1) the Company is worth today what it can generate in future cash to the Company, (2) cash received today is more than an equal amount of cash received in the future, and (3) future cash flows can be reasonably estimated.

The following table summarizes assumptions used for fair value of promissory note as of the dates presented:

	3/31/2022	3/31/2021
Stock price	—	\$3.75
Time	—	1.5 years
Risk-free rate	—	0.12%
Volatility	—	50.6%

The following table includes the changes in fair value of the promissory note (*in thousands*):

March 31, 2021	\$	16,128
Interest expense accrued		77
Decrease in fair value		(605)
Conversion		(15,600)
March 31, 2022	\$	—

On October 4, 2021, the promissory note of \$15.6 million, consisting of an outstanding principal amount of \$15.0 million plus accrued but unpaid interest of \$0.6 million, was converted into an aggregate of 3,120,000 shares of common stock. See Note 11 - Debts and Note 13 - Stockholders' Equity.

Foreign Currency Forward and Option Contracts

During the year ended March 31, 2023, the Company entered into four quarterly tiered collar contracts consisting of foreign currency forward and option contracts to manage the foreign exchange risk associated with certain foreign currency-denominated assets and liabilities, specifically those associated with its Japanese operations. The contracts have quarterly maturities ending January 2024.

As a result of foreign currency fluctuations, the U.S. dollar equivalent values of the Company's foreign currency-denominated assets and liabilities change. The Company has not elected to account for these contracts as hedge instruments and as such, gains and losses on these contracts are included in other income (expense), net in the Company's consolidated statements of operations, along with foreign currency gains and losses of the related foreign currency-denominated assets and liabilities associated with these foreign currency forward and option contracts. During year ended March 31, 2023 the Company recognized net gains of \$14 thousand associated with these contracts.

As the forward contract and option model employs market observable inputs such as spot currency rates and forward points, the Company has determined that the inputs used to value its derivatives fall within Level 2 of the fair value hierarchy. As of March 31, 2023 the fair value of the Company's derivative assets were \$7 thousand and there were no derivative liabilities. The Company had no derivative assets or liabilities as of March 31, 2022.

The following table presents the fair value of derivative instruments recognized in the Company's consolidated balance sheets as of March 31, 2023 (*in thousands*):

	Derivative Not Designated as Hedging Instruments	Gross Amounts of Recognized Assets and Liabilities	Gross Amounts Offset in the Balance Sheet	Net Amounts of Assets and Liabilities Presented in the Balance Sheet
Prepaid expenses and other current assets	\$ 7	\$ 7	\$ —	\$ 7
Net	\$ 7	\$ 7	\$ —	\$ 7

Note 16 - 401(k) Savings Plan

The Company has a 401(k) savings plan (the 401(k) plan). The 401(k) plan is a defined contribution plan intended to qualify under Section 401(k) of the Internal Revenue Code. All full-time employees of the Company are eligible to participate pursuant to the terms of the 401(k) plan. Contributions by the Company are discretionary, and the Company made no contributions during the years ended March 31, 2023 and 2022.

Note 17 - Income Taxes

For the year ended March 31, 2023, the Company reported a worldwide consolidated pre-tax loss of \$30.6 million, which consisted of a pre-tax loss from U.S. operations of approximately \$27.5 million and pre-tax loss from Japan operations of approximately \$3.1 million. The pre-tax loss from Japan operations consists of \$1.2 million from Transphorm Japan, Inc., \$3 thousand pre-tax loss from Transphorm Aizu, Inc. and \$1.9 million pre-tax loss from Transphorm Japan Epi, Inc.

For the year ended March 31, 2022, the Company reported a worldwide consolidated pre-tax loss of \$10.2 million, which consisted of a pre-tax loss from U.S. operations of approximately \$8.8 million and pre-tax loss from Japan operations of approximately \$1.4 million. The pre-tax loss from Japan operations consists of \$1.2 million from Transphorm Japan, Inc., \$0.6 million pre-tax loss from Transphorm Aizu, Inc. and \$0.3 million pre-tax income from Transphorm Japan Epi, Inc.

There is no U.S. federal or foreign provision for income taxes because the Company has incurred operating losses since inception and is in a full valuation allowance position. For the year ended March 31, 2023, the Company did not record a state income tax provision. For the year ended March 31, 2022, the Company recorded a state income tax provision of \$1 thousand which represents minimum taxes. Deferred income taxes reflect the net tax effects of the net operating losses and the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Significant components of the Company's deferred tax assets and deferred tax liabilities as of the dates presented as follows (*in thousands*):

	March 31,	
	2023	2022
Deferred tax assets:		
Net operating loss carryforwards	\$ 53,496	\$ 49,715
Tax credits	6,898	6,171
California capitalized research and development	1	40
Research and development	1,708	—
Others, net	679	564
Total deferred tax assets	62,782	56,490
Valuation allowance	(62,933)	(56,550)
Deferred tax asset, net of valuation allowance	(151)	(60)
Deferred tax liabilities:		
Fixed assets	151	60
Total deferred tax liabilities	151	60
Net deferred tax assets	\$ —	\$ —

As of March 31, 2023 and 2022, the Company had no assurance that future taxable income would be sufficient to fully utilize the net operating loss carryforwards and other deferred tax assets in the future. Consequently, the Company determined that a valuation allowance of approximately \$62.9 million and \$56.6 million as of March 31, 2023 and 2022, respectively, was needed to offset the deferred tax assets resulting mainly from the net operating loss carryforwards.

The Company files income tax returns in the U.S. federal, Arizona, California, Colorado, Illinois, New Jersey, and Oregon jurisdictions and is subject to U.S. federal, state, and local income tax examinations by tax authorities. Generally, the statute of limitations is 3 years for U.S. federal income tax and 4 years for state and local taxes. The statute of limitations may be extended for tax years where a corporation has a net operating loss carryforward or by agreement with the jurisdictional taxing authority. Accordingly, all of the Company's U.S. federal, state and local income tax years since inception remain open to examination by tax authorities. The Company is not currently under audit by any taxing authority.

The Company follows the provisions of uncertain tax positions as addressed in ASC 740-10. The Company recognized no increase or decrease in the liability for unrecognized tax benefits for any period presented. The Company recognizes interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses. No such interest or penalties were recognized during the period presented. The Company had no accruals for interest and penalties at March 31, 2023 and 2022.

The utilization of the Company's net operating loss and tax credit carryforwards is dependent on the future profitability of the Company. Further, the Internal Revenue Code imposes substantial restrictions on the utilization of such carryforwards in the event of an ownership change of more than 50%, as defined, during any three-year period (Section 382 and 383 limitations). The Company has determined that several ownership changes have occurred, which have resulted in substantial limitations on the Company's ability to utilize its pre-ownership change net operating loss and tax credit carryforwards. These substantial limitations are expected to result in both a permanent loss of certain tax benefits related to net operating loss carryforwards and federal research and development credits, as well as an annual utilization limitation. The Company performs an annual study to determine if any additional tax benefits need to be adjusted due to Section 382 and Section 383 limitations. As of March 31, 2023, the Company performed the analysis and management did not believe any adjustments to current tax benefits would be necessary. However, it is important to note that the Company continues to raise capital and such transaction could have an effect of such limitations. See Note 19 - Subsequent Events.

The federal net operating loss generated for the years ended March 31, 2023 and 2022 of \$17.4 million and \$9.8 million, respectively, can be carried forward indefinitely. However, the federal deduction for net operating losses incurred in tax years beginning after January 1, 2021 is limited to 80% annual taxable income. Under the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), the suspension of net operating losses generated in years 2018, 2019, 2020 and 2021 are not subject to the 80% limitation. The state net operating loss generated for the years ended March 31, 2023 and 2022 of \$0.1 million and \$2.6 million, respectively, can be carried forward 20 years.

As of March 31, 2023, the Company has federal net operating loss carryforwards of \$276.1 million, of which \$207.5 million will begin to expire in 2027 unless previously utilized, and the Company has state net operating loss carryforwards of \$151.6 million which will begin to expire in 2028 unless previously utilized. The Company also has foreign net operating loss carryforwards of approximately \$7.7 million which will begin to expire in 2024. As of March 31, 2023, the Company has federal research and development credit carryforwards of \$5.4 million, which will begin to expire in 2032 unless previously utilized, and the Company has California research and development credit carryforwards of \$4.7 million, which do not expire.

Deferred tax assets have not been established for net operating and tax credit carryforwards that are deemed to have no value due to the Section 382 and 383 limitations discussed above and, therefore, are not reflected in the table of deferred tax assets presented above. Future ownership changes, if any, may further limit the Company's ability to utilize its remaining net operating losses and tax credit carryforwards. The Company performed an analysis as of March 31, 2023 and it was determined that no further limitations on tax attributes were required.

Reconciliation between federal statutory tax rate and the effective tax rate is shown in the following table for the periods presented:

	Year Ended March 31,	
	2023	2022
Federal statutory income tax rate	21.00 %	21.00 %
Research and development credit	2.38 %	7.10 %
Nondeductible expense	(0.70) %	1.80 %
Loss in joint venture	— %	(1.87) %
Foreign income tax rate difference	0.99 %	1.39 %
Others, net	(0.90) %	(0.40) %
Valuation allowance	(22.77) %	(29.02) %
Effective tax rate	— %	— %

On March 27, 2020, the CARES Act was signed into law. The CARES Act repealed the 80% taxable income limitation for the 2018–2020 taxable years and reinstated NOL carrybacks for the 2018–2020 taxable years. In

addition, the CARES Act temporarily increased the business interest deduction limitations from 30% to 50% of adjusted taxable income for the 2019 and 2020 taxable year. Lastly, a TCJA technical correction classified qualified improvement property to have a 15-year recovery period, allowing the bonus depreciation deduction to be claimed for such property retroactively as if it was included in the TCJA at the time of enactment.

On December 21, 2020, the Consolidated Appropriations Act (“CAA”) was signed into law. We do not expect any of the enactments of the CAA to have a material impact on the Company as of March 31, 2023.

Under the Tax Cuts and Jobs Act of 2017, research and development costs are no longer fully deductible and are required to be capitalized and amortized for U.S. tax purposes effective January 1, 2022. The mandatory capitalization requirement increases our deferred tax assets.

Note 18 - Related Party Transactions

The Company entered into the following related party transactions for the periods indicated (*in thousands*):

	Year Ended March 31,	
	2023	2022
Joint Venture-GaNovation (1):		
Product sale	\$ 4,008	\$ 476
Inventory purchase	360	181
Fixed asset purchase	370	—
Cost of goods sold	4,124	3,061
Research and development expense	369	456
Consumption tax	312	140
Employee and related benefits	158	343
Gain upon termination of JVA and settlement of its obligation	—	1,455
Service fees	267	—
Service expense	—	12
Yaskawa:		
Revenue per a cooperation and development agreement	1,209	1,459
Gain on Yaskawa promissory note conversion	—	1,221
Non-controlling stockholder:		
Product sale	—	19
License maintenance fee	—	111
Consulting expense	—	176
Nexperia:		
Product sale	2,565	1,670
License and service fee income	226	8,479
Reimbursements in license maintenance fee	113	150
Interest expense	730	714

(1) Includes transactions for AFSW during the four months ended July 30, 2021.

As of March 31, 2023 and 2022, total due to and from related parties were as follows (*in thousands*):

	March 31,	
	2023	2022
Due from (included in Accounts receivable, net):		
Joint venture	\$ 1,713	\$ 719
Stockholder and noteholder (Note 3)	1,152	515
Total due from related parties	\$ 2,865	\$ 1,234
Due to (included in Accounts payable and accrued expenses):		
Joint venture	\$ 968	\$ 760
Stockholder and noteholder (Note 3)	93	102
Total due to related parties	\$ 1,061	\$ 862

Note 19 - Subsequent Events

Warrant Repricing and Issuance

On April 3, 2023, the Company entered into warrant exercise inducement offer letters (“Inducement Letters”) with certain holders of outstanding warrants to purchase shares of the Company’s common stock (such holders, the “Exercising Holders,” and such warrants, the “Existing Warrants”), pursuant to which the Exercising Holders agreed to exercise, for cash, Existing Warrants to purchase, in the aggregate, 1,815,848 shares of the Company’s common stock (the “Existing Warrant Shares”), in exchange for the Company’s agreement to (i) lower the exercise price of the Existing Warrants to \$4.00 per share and (ii) issue new warrants (the “Inducement Warrants”) to the Exercising Holders to purchase, in the aggregate, up to 2,269,810 shares of the Company’s common stock.

The Inducement Warrants have an exercise price of \$5.00 per share, provide for a cashless exercise feature, and are exercisable until April 3, 2026. Certain Exercising Holders have contractually agreed to restrict their ability to exercise the Inducement Warrants issued to them if the holder (together with such holder’s affiliates, and any persons acting as a group together with such holder or any of such holder’s affiliates) would beneficially own a number of shares in excess of 9.99% of the shares of the Company’s common stock then outstanding. At the holder’s option, upon notice to the Company, the holder may increase or decrease this beneficial ownership limitation not to exceed 19.99% of the shares of common stock then outstanding, with any such increase becoming effective upon 61 days’ prior notice to the Company.

Private Placement of Common Stock and Warrants

On April 3, 2023, the Company entered into securities purchase agreements (each, a “Purchase Agreement”) with two accredited investors that are affiliated with each other (the “Purchasers”) pursuant to which the Company agreed to sell to the Purchasers in a private placement (the “Private Placement”) for an aggregate purchase price of \$2.0 million (i) an aggregate of 500,000 shares (the “Shares”) of the Company’s common stock at a purchase price of \$4.00 per share and (ii) warrants to purchase an aggregate of 250,001 shares of the Company’s common stock (the “Warrants”). The Warrants have an exercise price of \$5.00 per share, provide for a cashless exercise feature, and are exercisable until April 3, 2026.

On April 3, 2023, the Company entered into a registration rights agreement (the “Registration Rights Agreement”) with the Purchasers, pursuant to which the Company agreed to register the Shares and the shares of Common Stock issuable upon exercise of the Warrants (collectively, the “Registrable Securities”) for resale. Under the terms of the Registration Rights Agreement, the Company is obligated, subject to certain exceptions, to (i) no later than 30 days after the closing of the Private Placement, file a registration statement with the Securities and Exchange Commission (the “SEC”) covering the resale or other disposition of the Registrable Securities, (ii) use its commercially reasonable efforts to cause such registration statement to become effective no later than 60 days after such registration statement is first filed with the SEC, and (iii) use its commercially reasonable efforts to keep such

registration statement effective for up to three years after the date on which such registration statement is declared effective by the SEC. The registration statement was filed and declared effective within the time period required by the Registration Rights Agreement.

The Company received total aggregate gross proceeds of approximately \$9.3 million (before deducting legal costs of \$0.4 million) from the exercise of the Existing Warrants by the Exercising Holders and from the Purchasers in the private placement.

Revolving Loan Repayment

On April 4, 2023, the Company paid to Nexperia the revolving loan of \$12.2 million, consisting of an outstanding principal amount of \$12.0 million plus accrued but unpaid interest of \$0.2 million. See Note 11 - Debt.

Performer Agreement

On May 17, 2023, the Company entered into a Performer Agreement (the “Agreement”) with the National Security Technology Accelerator (“NSTXL”), pursuant to which the Company has agreed to develop and manufacture advanced GaN epiwafer materials in accordance with statements of work, and in support of an agreement between NSTXL and the U.S. Government. Under the Agreement, the Company may receive up to \$15.2 million in funding from NSTXL, payable in installments based on achievement of project milestones. The Agreement is incrementally funded with \$7.5 million in funding committed as of the execution date of the Agreement, subject to the completion of project milestones. The Agreement has an initial expiration date of December 9, 2024, which may be extended in the event the U.S. Government exercises its option to provide future funding commitments to the Company that may total up to \$7.7 million.

Rights Offering

On June 16, 2023, the Company issued a press release announcing that the independent Financing Committee of the Company’s board of directors has approved a subscription rights offering intended to raise up to \$15 million (the “Rights Offering”) and has fixed the close of business (5:00 p.m. Eastern Daylight Time) on June 26, 2023 as the record date for the Rights Offering. The Rights Offering will be made through the distribution to all holders of record of the Company’s common stock as of the record date of non-transferable subscription rights to purchase a fraction of a share of the Company’s common stock, at a ratio to be determined, for every one right held at a subscription price to be determined prior to the commencement of the rights offering.

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

None.

Item 9A. Controls and Procedures.

Inherent Limitations on Effectiveness of Controls

Our management, including our principal executive officer and principal financial officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well-designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected.

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information we are required to disclose in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance.

Our management, with the participation of our chief executive officer and our chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Report. Based on this evaluation, management, including our chief executive officer and our chief financial officer, concluded that as of March 31, 2023, our disclosure controls and procedures were not effective because of a material weakness in our internal control over financial reporting, as described below.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act). Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our internal control over financial reporting as of the end of the period covered by this Report, based on the criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that due to a material weakness in our internal control over financial reporting as described below, our internal control over financial reporting was not effective as of March 31, 2023.

Material Weakness and Related Remediation Initiatives

During the reporting period, our staffing resources in our finance department continued to be insufficient to support the complexity of our financial reporting requirements. We did not have adequate staff members with technical accounting knowledge and financial reporting experience, and as a result we have had an inadequate level of precision, evidence or timeliness in the performance of review controls as it relates to inventory, joint venture accounting, right of use asset and lease liability, accrual of expenses, revenue and financial reporting, including consideration of impairment, foreign currency impact and tax disclosure.

Management has initiated the corrective actions and procedures to remediate the identified material weakness, including hiring additional personnel with technical accounting knowledge and financial reporting experience, and has started to implement processes to support the complexity of our financial statements. We anticipate that these initiatives will be at least partially, if not fully, implemented by the end of the fiscal year 2024. However, our ability to continue these remediation efforts is contingent upon our ability to raise significant additional funding.

Changes in Internal Control Over Financial Reporting

Except as described above, there was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended March 31, 2023 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

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

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Our Directors

Our business and affairs are managed under the direction of our board of directors, which currently consists of seven members, four of whom are “independent” under the listing rules of The Nasdaq Stock Market (the “Nasdaq Listing Rules”). Our amended and restated certificate of incorporation provides that our board of directors is divided into three classes, designated Class I, Class II and Class III, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective three-year terms. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the total number of our directors.

The names of our directors and certain information about them as of June 20, 2023 is set forth below. Except for Eiji Yatagawa, who was previously nominated to our board of directors by KKR Phorm Investors L.P., there are no arrangements or understandings between any of our directors and any other person pursuant to which he or she is or was to be selected as a director.

Name	Age	Position	Director Since	Class	Current Term Expires
Julian Humphreys (1)(2)(3)	60	Director	2020	I	2024
Katharina McFarland (1)(2)(3)	64	Director	2021	I	2024
Cynthia (Cindi) Moreland (1)(3)	64	Director	2021	I	2024
Umesh Mishra	64	Chief Technology Officer and Chair of the Board	2020	II	2025
Eiji Yatagawa	45	Director	2020	II	2025
Primit Parikh	51	President and Chief Executive Officer, Director	2023	III	2023
Kelly Smales (1)(2)	64	Director	2021	III	2023

- (1) Member of the Audit Committee
- (2) Member of the Compensation Committee
- (3) Member of the Nominating and Corporate Governance Committee

Julian Humphreys has served as a member of our board of directors since October 2020. Dr. Humphreys has over 30 years of experience in the semiconductor industry, including 20 years specifically with power semiconductors. From February 2017 to April 2019, Dr. Humphreys was a senior vice president and general manager at Nexperia B.V. From June 2010 to January 2017, Dr. Humphreys was a vice president and general manager with Nexperia’s predecessor, the NXP Semiconductors Standard Products Division of NXP Semiconductors N.V. Dr. Humphreys was also the managing director of Nexperia UK Ltd., and its predecessor entity NXP Semiconductors UK Ltd., from September 2011 to March 2019. He holds a B.Eng. degree in electronics and a Ph.D. in semiconductor physics, both from the University of Liverpool.

Dr. Humphreys was selected to serve as a member of our board of directors due to his significant experience in the technology industry and his technical expertise.

Katharina McFarland has served as a member of our board of directors since February 2021. With over 30 years of government service, Ms. McFarland is widely recognized as a leading subject-matter expert on government procurement. Ms. McFarland has served as the president of Blue Oryx Inc., a consulting services firm, since January 2017. She serves as Chair of the Board of Army Research and Development at the National Academies of Science and as a director of Virgin Orbit Holdings, Inc. (Nasdaq: VORB), Science Applications International Corporation

(NYSE: SAIC), the Procurement Round Table, and Exyn Technologies. Ms. McFarland was a director of Engility Holdings, Inc. from June 2017 until its acquisition by SAIC in January 2019. Ms. McFarland also serves on the Advisory Boards of Anduril Industries, Cypress International Senior Strategy Group, and Sehlke Consulting. She was previously the Assistant Secretary of Defense for Acquisition (2012 to 2017) and acting Assistant Secretary of the Army (Acquisition, Logistics & Technology) (2016 to 2017). She was President of the Defense Acquisition University from 2010 to 2012, and Director of Acquisition, Missile Defense Agency from 2006 to 2010. Ms. McFarland is an accredited Materials, Mechanical, Civil and Electronics Engineer. She has received the Presidential Meritorious Executive Rank Award, the Secretary of Defense Medal for Meritorious Civilian Service Award, the Department of the Navy Civilian Tester of the Year Award, and the Navy and United States Marine Corps Commendation Medal for Meritorious Civilian Service. Ms. McFarland brings substantial experience with the U.S. Department of Defense, Department of Army, and Intelligence Community procurement with a focus on Space applications, Artificial Intelligence, Cyber, and IT technologies in defense acquisition, program management, logistics and technology. Ms. McFarland holds a B.Sc. degree in engineering from Queen's University, a master's degree in program management from the Program Management Institute, and an honorary doctoral degree in engineering from Cranfield University.

Ms. McFarland was selected to serve on our board of directors due to her depth of experience in government service and procurement.

Cynthia (Cindi) Moreland has served as a member of our board of directors since October 2021. Ms. Moreland has over 30 years of experience working as an attorney within the technical field, including fifteen years as a general counsel, and over 20 years as a chief compliance officer. Since April 2021, she has served as the general counsel of Care.com, an online marketplace for various care services and a subsidiary of IAC/InterActiveCorp (Nasdaq: IAC). From March 2017 to April 2021, Ms. Moreland served as senior vice president and general counsel for IAC Applications, an operating business within IAC/InterActiveCorp that included the Mosaic Group, the mobile application division of IAC/InterActiveCorp. From February 2016 to March 2017, she served as an independent strategic advisor to various law firm and business clients. Ms. Moreland holds a B.A. degree in English as well as a J.D. from the University of Mississippi.

Ms. Moreland was selected to serve on our board of directors due to her significant experience as corporate counsel and her legal expertise.

Umesh Mishra has served as our Chief Technology Officer and as a member of our board of directors since February 2020 and as Chair of the Board since May 2023. Dr. Mishra is a co-founder of our main operating subsidiary, Transphorm Technology, Inc., and has served as Transphorm Technology's Chief Technology Officer and as a member of the board of directors of Transphorm Technology since March 2007. Previously, Dr. Mishra was Chief Executive Officer of Transphorm Technology from 2007 to 2013. Prior to co-founding Transphorm Technology, Dr. Mishra co-founded Nitres Inc. in 1996. Nitres, the first company to develop GaN LEDs and transistors, was acquired by Cree, Inc. in 2000. Dr. Mishra has also been a Professor of Electrical and Computer Engineering at the University of California, Santa Barbara since 1990. He holds a B.S. Tech from the Indian Institute of Technology, an M.S. from Lehigh University and a Ph.D. from Cornell University.

Dr. Mishra was selected to serve on our board of directors due to his deep knowledge of Transphorm Technology, his significant experience in the technology industry and his technical expertise.

Eiji Yatagawa has served as a member of our board of directors since February 2020 and as a member of the board of directors of Transphorm Technology since June 2015. Mr. Yatagawa joined KKR in 2006 and is a Member on the Private Equity team. Prior to joining KKR, Mr. Yatagawa was an associate in Goldman Sachs & Co.'s investment banking team from 2002 to 2006. Mr. Yatagawa currently serves on the board of directors of several privately-held companies. He holds a B.S. in Mathematical Engineering and an M.S. in Mathematical Engineering from the University of Tokyo.

Mr. Yatagawa was selected to serve as a member of our board of directors due to his significant experience in financial and investment matters and experience within the technology sector.

Primit Parikh has served as our Chief Executive Officer and as a member of our board of directors since May 2023 and as our President since February 2020. Dr. Parikh previously served as our Chief Operating Officer from February 2020 to May 2023. Dr. Parikh is a co-founder of our main operating subsidiary, Transphorm Technology, Inc., and has served as Transphorm Technology’s Chief Operating Officer since 2007, as well as a member of the board of directors of Transphorm Japan, Inc. since 2014. With over 25 years of semiconductor and entrepreneurial experience, his background includes experience with capital raises, international markets and strategic partnerships, products and manufacturing, intellectual property, GaN and semiconductor technology, and government contracting. Prior to Transphorm Technology, Dr. Parikh led GaN electronics at Nitres Inc. until its acquisition in 2000 by Cree, where he was responsible for RF GaN electronics, as well as cross functional programs in LED technology. Dr. Parikh has co-authored more than 75 publications and holds more than 40 patents. He holds a B.Tech. in Electrical Engineering from IIT, Mumbai and a Ph.D. in Electrical and Computer Engineering from the University of California, Santa Barbara.

Dr. Parikh was selected to serve on our board of directors due to his deep knowledge of Transphorm Technology, his significant experience in the technology industry and his technical expertise.

Kelly Smales has served as a member of our board of directors since June 2021. Mr. Smales has over 30 years of experience working as a certified public accountant, including with multiple semiconductor companies. From May 2015 to March 2017, she was the chief financial officer at KnuEdge Inc. (formerly Intellisys), a machine learning hardware and software company. From November 2011 to May 2015, Ms. Smales was the chief financial officer for Advanced Nanotechnology Solutions Inc., a semiconductor manufacturing start-up company. Ms. Smales holds a B.S. degree in accounting from Arizona State University and an M.B.A. degree from the University of Chicago.

Ms. Smales was selected to serve on our board of directors due to her significant financial and accounting expertise.

Our Executive Officers

The names of our executive officers and certain information about them as of June 20, 2023 is set forth below. There are no arrangements or understandings between any of our executive officers and any other person pursuant to which he or she is or was to be selected as an officer.

Name	Age	Position
Primit Parikh	51	President and Chief Executive Officer, Director
Cameron McAulay	47	Chief Financial Officer
Umesh Mishra	64	Chief Technology Officer and Chair of the Board

Primit Parikh. Please see “Our Directors” above for biographical information about Dr. Parikh.

Cameron McAulay has served as our Chief Financial Officer since February 2020. He has also served as Transphorm Technology’s Chief Financial Officer since November 2015. Previously, Mr. McAulay served as Finance Director, Global Customer Organization and Director of Internal Audit with KLA-Tencor Corporation from December 2012 to November 2015. Prior to that, Mr. McAulay served as Finance Director and Group Financial Controller at Atmel Corporation from November 2011 to December 2012 and had a 7-year tenure at National Semiconductor Corporation in a variety of Operational and Corporate leadership positions including Chief Audit Executive. He holds a BSc. Mathematics, Statistics and Accountancy from Strathclyde University and is a member of the Chartered Accountants of Scotland.

Umesh Mishra. Please see “Our Directors” above for biographical information about Dr. Mishra.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Code of Business Conduct and Ethics

Our board of directors has adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer, and other executive and senior financial officers. The full text of our code of business conduct and ethics is available on our website at www.transphormusa.com. We intend to disclose any amendments to our code of business conduct and ethics, or waivers of its requirements, on our website or in filings under the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

Audit Committee

We have a standing audit committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. Directors Julian Humphreys, Katharina McFarland, Cynthia Moreland and Kelly Smales (chair) serve on the audit committee. Our board of directors has determined that each member of the audit committee meets the requirements for independence of audit committee members under the rules and regulations of the SEC and the Nasdaq Listing Rules, and also meets the financial literacy requirements of the Nasdaq Listing Rules. In addition, our board of directors has determined that Ms. Smales is an “audit committee financial expert” within the meaning of Item 407(d) of Regulation S-K under the Securities Act of 1933, as amended.

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires that our executive officers and directors, and persons who own more than 10% of our common stock, file reports of ownership and changes of ownership with the SEC. Such directors, executive officers and 10% stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file. Based on our review of forms we received, or written representations from reporting persons stating that they were not required to file these forms, we believe that, during the year ended March 31, 2023, all Section 16(a) filing requirements were satisfied on a timely basis.

Item 11. Executive Compensation.

Non-Employee Director Compensation

We have not established a policy to provide compensation to our non-employee directors for their services in such capacity. Directors who are employed by us are not compensated for their service on our board of directors.

There was no compensation awarded to, earned by or paid to our non-employee directors during the year ended March 31, 2023.

The following table lists all outstanding equity awards held by each of our non-employee directors as of March 31, 2023.

Name	Aggregate Number of Shares Underlying Unvested Stock Awards	Aggregate Number of Shares Underlying Outstanding Options
Dr. Humphreys	15,313	55,000
Ms. McFarland	17,500	55,000
Ms. Moreland	20,625	50,000
Ms. Smales	21,875	55,000
Mr. Yatagawa	—	—

Executive Compensation

As an “emerging growth company” as defined in the JOBS Act and a smaller reporting company we are not required to include a Compensation Discussion and Analysis section and have elected to comply with the scaled disclosure requirements applicable to emerging growth companies and smaller reporting companies.

Summary Compensation Table

The following table presents information regarding the total compensation of our named executive officers, who consist of our principal executive officer and the next two most highly compensated individuals who were serving as our executive officers as of March 31, 2023, for the years ended March 31, 2023 and 2022.

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)(1)	Option Awards (\$)(1)	All Other Compensation (\$)(2)	Total
Mario Rivas (3) <i>Former Chief Executive Officer</i>	2023	350,662	90,000	89,999	—	49,800	580,461
	2022	364,162	—	223,720	139,440	49,800	777,122
Cameron McAulay <i>Chief Financial Officer</i>	2023	275,663	75,000	74,996	—	—	425,659
	2022	275,669	—	175,780	109,560	—	561,009
Primit Parikh (4) <i>President and Chief Executive Officer; Former Chief Operating Officer</i>	2023	300,663	90,000	89,999	14,007	—	494,669
	2022	300,693	—	559,300	348,600	—	1,208,593

(1) The amounts reported represent the aggregate grant-date fair value of restricted stock unit (“RSU”) awards and/or stock options awarded to the named executive officer, calculated in accordance with ASC Topic 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-based vesting conditions. For a discussion of valuation assumptions, see the stock-based compensation note to our audited financial statements included in this Report.

(2) Represents lease payments for the rental of a house for Mr. Rivas near our headquarters.

(3) During the years ended March 31, 2023 and 2022, Mr. Rivas served as our Chief Executive Officer. He retired on May 15, 2023.

(4) During the years ended March 31, 2023 and 2022, Dr. Parikh served as our President and Chief Operating Officer. Dr. Parikh became our Chief Executive Officer on May 15, 2023.

Employment and Change in Control Agreements

We generally enter into offer letters of employment before an executive joins the company. This offer letter describes the basic terms of the executive’s employment, including the executive’s start date, starting salary and initial equity awards. None of the offer letters with our executive officers contains any change in control or severance benefits.

Outstanding Equity Awards at Fiscal 2023 Year-End

The following table presents, for each of our named executive officers, information regarding outstanding stock options held as of March 31, 2023.

Name	Grant Date (1)	Option Awards		Option Exercise Price (\$)	Option Expiration Date (2)
		Number of Securities Underlying Unexercised Options			
		Exercisable	Unexercisable		
Mr. Rivas	12/15/2021 (4)	18,666	23,334	7.99	12/15/2031
	11/30/2016 (3)	66,313	—	4.34	11/29/2026
	11/30/2016 (3)	292,192	—	4.34	11/29/2026
Mr. McAulay	12/15/2021 (4)	14,666	18,334	7.99	12/15/2031
	11/30/2016 (3)	62,168	—	4.34	11/29/2026
	11/30/2016 (3)	67,722	—	4.34	11/29/2026
Dr. Parikh	12/09/2022 (5)	3,103	1,552	4.77	12/09/2032
	08/29/2022 (5)	1,042	521	5.24	08/27/2032
	12/15/2021 (4)	46,666	58,334	7.99	12/15/2031
	06/06/2019 (3)	6,870	—	3.14	06/05/2029
	11/30/2016 (3)	80,891	—	4.34	11/29/2026
	11/30/2016 (3)	207,228	—	4.34	11/29/2026

(1) Unless otherwise noted, each outstanding option was granted pursuant to the Transphorm Technology 2015 Equity Incentive Plan.

(2) The expiration date shown is the normal expiration date and the latest date that options may be exercised. Options may terminate earlier in certain circumstances, such as in connection with a termination of employment or change in control.

(3) This option is fully vested and exercisable.

(4) This option was granted pursuant to our 2020 Equity Incentive Plan. One-third of the shares subject to this option vested on November 15, 2022 and 1/36th of the shares subject to this option will vest each month thereafter, subject to the executive's continued service through each applicable vesting date.

(5) This option was granted pursuant to our 2020 Equity Incentive Plan. 1/12th of the shares subject to this option will vest monthly after July 1, 2022, subject to the executive's continued service through each applicable vesting date.

The following table presents, for each of our named executive officers, information regarding outstanding stock awards held as of March 31, 2023.

Name	Grant Date (1)	Stock Awards	
		Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested \$(2)
Mr. Rivas	01/01/2023 (3)	16,544	66,011
	12/15/2021 (4)	18,667	74,481
	08/27/2020 (5)	31,047	123,878
Mr. McAulay	01/01/2023 (3)	13,786	55,006
	12/15/2021 (4)	14,667	58,521
	08/27/2020 (5)	24,885	99,291
Dr. Parikh	01/01/2023 (3)	16,544	66,011
	12/15/2021 (4)	46,667	186,201
	08/27/2020 (5)	41,529	165,701

(1) Each outstanding award of RSUs was granted pursuant to our 2020 Equity Incentive Plan.

(2) Values reported were determined by multiplying the number of unvested RSUs by \$3.99, the closing price of our common stock on the Nasdaq Capital Market on March 31, 2023.

(3) Consists of unvested RSUs which are scheduled to vest on January 1, 2024, subject to continued service with us through the vesting date.

(4) Consists of unvested RSUs, one-half of which are scheduled to vest on each of November 15, 2023 and November 15, 2024, subject to continued service with us through the applicable vesting date.

(5) Consists of unvested RSUs which are scheduled to vest on July 1, 2023, subject to continued service with us through the vesting date.

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

Equity Compensation Plan Information

The following table provides information as of March 31, 2023 about our equity compensation plans under which shares of our common stock are authorized for issuance.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted average exercise price of outstanding options, warrants and rights(1)	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders(2)	3,725,226	\$ 4.90	5,080,099 (3)
Equity compensation plans not approved by security holders	—	—	—
Total	3,725,226	\$ 4.90	5,080,099

(1) Restricted stock units, which do not have an exercise price, are excluded from the calculation of weighted-average exercise price.

(2) Equity compensation plans approved by our stockholders include our 2020 Equity Incentive Plan (the “2020 Plan”), the Transphorm Technology, Inc. 2015 Equity Incentive Plan (the “2015 Plan”) and the Transphorm Technology, Inc. 2007 Stock Plan (the “2007 Plan”).

(3) This number represents shares of common stock reserved for future issuance under the 2020 Plan as of March 31, 2023. Subject to the adjustment provisions of the 2020 Plan, and the automatic increase described below, the maximum aggregate number of shares of our common stock that may be issued under the 2020 Plan is (i) 2,588,077 shares, plus (ii) any shares of our common stock subject to issued and outstanding awards under the 2007 Plan or 2015 Plan that were assumed by us and that, on or after February 12, 2020, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by us for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by us due to failure to vest, with the maximum number of shares to be added to the 2020 Plan pursuant to this clause (ii) equal to 2,461,923 shares. The number of shares of common stock available for issuance under the 2020 Plan will automatically increase on the first day of each fiscal year beginning with our 2022 fiscal year and ending on (and including) our 2030 fiscal year, in an amount equal to the least of (i) 5,000,000 shares, (ii) five percent (5%) of the outstanding shares of our common stock on the last day of the immediately preceding fiscal year, or (iii) such other amount as the administrator of the 2020 Plan may determine.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth information with respect to the beneficial ownership of our common stock as of June 16, 2023 for:

- each person (or group of affiliated persons) who is known by us to beneficially own more than 5% of our common stock;
- each of our named executive officers;
- each of our directors; and
- all of our directors and current executive officers as a group.

We have determined beneficial ownership in accordance with SEC rules.

Percentage of beneficial ownership is based on 59,373,698 shares of our common stock outstanding as of June 16, 2023. In computing the number of shares beneficially owned by a person or entity and the percentage ownership of that person or entity, we deemed to be outstanding all shares of our common stock as to which such person or entity has the right to acquire within 60 days of June 16, 2023, through the exercise of any option or other right. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person or entity. Except as indicated in the footnotes below, and subject to applicable community property laws, we believe, based on the information furnished to us, the persons and entities named in the table below have sole voting and investment power with respect to all shares shown as beneficially owned by them. Unless otherwise noted below, the address of each beneficial owner named below is c/o Transphorm, Inc., 75 Castilian Drive, Goleta, CA 93117.

Name of Beneficial Owner	Shares Beneficially Owned (#)	Percentage Beneficially Owned (%)
5% Stockholders:		
KKR Phorm Investors L.P. (1)	22,988,480	38.52 %
Entities affiliated with AIGH Investment Partners, LP (2)	6,023,972	9.99 %
SAS Capital Co., Ltd. (3)	5,771,500	9.56 %
Nexperia B.V. (4)	4,000,000	6.74 %
Yaskawa Electric Corporation (5)	3,770,000	6.28 %
Ameriprise Financial, Inc. (6)	3,805,548	6.41 %
Named Executive Officers and Directors:		
Mario Rivas (7)	470,013	*
Cameron McAulay (8)	210,899	*
Primit Parikh (9)	532,673	*
Julian Humphreys (10)	61,874	*
Katharina McFarland (11)	50,624	*
Umesh Mishra (12)	606,060	1.01 %
Cynthia (Cindi) Moreland (13)	35,000	*
Kelly Smales (14)	45,000	*
Eiji Yatagawa (15)	—	*
All directors and current executive officers as a group (8 persons) (16)	1,542,130	2.55 %

* Represents less than 1% of the total.

(1) The number of shares beneficially owned consists of (i) 22,675,980 shares of common stock held by KKR Phorm Investors, L.P. (“Phorm”) and (ii) 312,500 shares of common stock issuable upon exercise of outstanding warrants held by Phorm. KKR Phorm Investors GP LLC, as the general partner of Phorm; KKR Group Partnership L.P., as the sole member of KKR Phorm Investors GP LLC; KKR Group Holdings Corp., as the general partner of KKR Group Partnership L.P.; KKR Group Co. Inc., as the sole shareholder of KKR Group Holdings Corp.; KKR & Co. Inc., as the sole shareholder of KKR Group Co. Inc.; KKR Management LLP, as the Series I preferred stockholder of KKR & Co. Inc.; and Messrs. Henry R. Kravis and George R. Roberts, as founding partners of KKR Management LLP, may be deemed to be the beneficial owners with respect to the shares directly owned by Phorm. Eiji Yatagawa is a member of our board of directors and serves as an executive of Kohlberg Kravis Roberts & Co. L.P. and/or one or more of its affiliates. The principal business address of each of the entities and persons identified in this footnote, except Mr. Roberts, is c/o Kohlberg Kravis Roberts & Co. L.P., 30 Hudson Yards, New York, NY 10001. The principal business address of Mr. Roberts is c/o Kohlberg Kravis Roberts & Co. L.P., 2800 Sand Hill Road, Suite 200, Menlo Park, CA 94025.

(2) The number of shares beneficially owned consists of (i) 3,338,616 shares of common stock held by AIGH Investment Partners, LP (“AIGH LP”), (ii) 825,527 shares of common stock held by WVP Emerging Manager Onshore Fund, LLC – AIGH Series (“AIGH Series”), (iii) 242,079 shares of common stock held by WVP Emerging Manager Onshore Fund, LLC – Optimized Equity Series (“OE Series”), (iv) 688,750 shares of common stock held by AIGH Investment Partners, LLC (“AIGH LLC” and together with AIGH LP, AIGH Series and OE Series, the “AIGH Entities”), and (v) 929,000 shares of common stock issuable upon exercise of outstanding warrants held by the AIGH Entities. The warrants held by the AIGH Entities contain a blocker provision under which the holder thereof does not have the right to exercise its warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof, together with the holder’s affiliates, and any other persons

acting as a group together with the holder or any of the holder's affiliates, of more than 9.99% of our common stock. The disclosed holdings do not include all of the shares underlying all of the warrants due to the blocker provisions. Mr. Orin Hirschman is the managing member of AIGH Capital Management, LLC, a Maryland limited liability company, which is an advisor with respect to the securities held by AIGH LP and a sub-advisor with respect to the securities held by AIGH Series and OE Series, and has voting and investment control over the securities held by the AIGH Entities. The principal business address of Mr. Hirschman and each of the AIGH Entities is 6006 Berkeley Avenue, Baltimore, MD 21209.

(3) The number of shares beneficially owned consists of (i) 4,750,000 shares of common stock held by SAS Capital Co., Ltd. ("SAS") and (ii) 1,021,500 shares of common stock issuable upon exercise of outstanding warrants held by SAS. Ms. Doris Hsu has voting and investment control over the securities held by SAS. The principal business address of SAS and Ms. Hsu is 2 F., No. 1, Sec. 2, Ligong 1st Rd., Wujie Township, Yilan County 26841, Taiwan (R.O.C.).

(4) The number of shares beneficially owned consists of 4,000,000 shares of common stock held by Nexperia B.V. ("Nexperia"). Wingtech Technology Co. Ltd. owns 80% of the equity of Nexperia and may be deemed to be the beneficial owner having voting and dispositive power with respect to these shares. The principal business address of Wingtech Technology Co. Ltd. 4F-6F, Building 4 of Juxin Yuan, No. 188, Pingfu Road, Xuhui District, Shanghai, China. The principal business address of Nexperia is Jonkerbosplein 52, 6534 AB Nijmegen, The Netherlands.

(5) The number of shares beneficially owned consists of (i) 3,120,000 shares of common stock held by Yaskawa Electric Corporation ("Yaskawa") and (ii) 650,000 shares of common stock issuable upon exercise of outstanding warrants held by Yaskawa. The principal business address of Yaskawa is 2-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu 806-0004, Japan.

(6) According to information reported by Ameriprise Financial, Inc. ("AFI") on a Schedule 13G/A filed on February 14, 2023, Columbia Seligman Technology and Information Fund (the "Fund") owns 2,987,500 shares of common stock and AFI and Columbia Management Investment Advisers, LLC ("CMIA") may be deemed to beneficially own 3,805,548 shares of common stock, which consists of (i) 3,763,166 shares as to which they have shared voting power and (ii) 3,805,548 shares as to which they have shared dispositive power. CMIA and AFI do not directly own any shares of our common stock. As the investment adviser to the Fund and various other unregistered and registered investment companies and other managed accounts, CMIA may be deemed to beneficially own these shares. As the parent holding company of CMIA, AFI may be deemed to beneficially own these shares. Each of CMIA and AFI disclaims beneficial ownership of these shares. The principal business address of CMIA and the Fund is 290 Congress Street, Boston, MA 02210. The principal business address of AFI is 145 Ameriprise Financial Center, Minneapolis, MN 55474.

(7) The number of shares beneficially owned consists of (i) 55,962 shares of common stock held by Mr. Rivas, (ii) 383,004 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023, and (iii) 31,047 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(8) The number of shares beneficially owned consists of (i) 36,875 shares of common stock held by Mr. McAulay, (ii) 149,139 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023, and (iii) 24,885 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(9) The number of shares beneficially owned consists of (i) 128,688 shares of common stock held by Dr. Parikh, (ii) 362,456 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023, and (iii) 41,529 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(10) The number of shares beneficially owned consists of (i) 21,875 shares of common stock held by Dr. Humphreys, (ii) 37,812 shares of common stock issuable pursuant to stock options that are exercisable within 60

days of June 16, 2023, and (iii) 2,187 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(11) The number of shares beneficially owned consists of (i) 19,687 shares of common stock held by Ms. McFarland and (ii) 30,937 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023.

(12) The number of shares beneficially owned consists of (i) 139,658 shares of common stock held by Dr. Mishra, (ii) 424,873 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023 and (iii) 41,529 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(13) The number of shares beneficially owned consists of (i) 11,250 shares of common stock held by Ms. Moreland, (ii) 21,875 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023 and (iii) 1,875 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(14) The number of shares beneficially owned consists of (i) 15,312 shares of common stock held by Ms. Smales, (ii) 27,500 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023 and (iii) 2,188 shares of common stock issuable upon the vesting of restricted stock units within 60 days of June 16, 2023.

(15) Mr. Yatagawa is a member of our board of directors and serves as an executive of Kohlberg Kravis Roberts & Co. L.P. and/or one or more of its affiliates. Mr. Yatagawa disclaims beneficial ownership of the shares held by KKR Phorm Investors L.P. The principal business address of Mr. Yatagawa is c/o Kohlberg Kravis Roberts & Co. L.P., 30 Hudson Yards, New York, NY 10001.

(16) Includes (i) 1,054,592 shares of common stock issuable pursuant to stock options that are exercisable within 60 days of June 16, 2023 and (ii) 114,193 shares of common stock issuable upon vesting of restricted stock units within 60 days of June 16, 2023.

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

The following is a description of transactions since April 1, 2021 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeded or will exceed the lesser of \$120,000 or one percent of the average of our total assets at year-end for our last two completed fiscal years; and
- any of our directors, executive officers or beneficial owners of more than 5% of our capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest, other than compensation and other arrangements that are described in the section titled “Executive Compensation.”

Private Placements

In August 2021, SAS Capital Co., Ltd. (“SAS”) purchased 1,000,000 shares of common stock from us in a private placement for an aggregate purchase price of \$5.0 million and received a warrant to purchase 209,000 shares of common stock at an exercise price of \$6.00 per share.

In November 2021, KKR Phorm Investors L.P. (“Phorm”) purchased 1,000,000 shares of common stock from us in a private placement for an aggregate purchase price of \$5.0 million and received a warrant to purchase 208,333 shares of common stock at an exercise price of \$6.00 per share.

In November 2021, SAS purchased 2,000,000 shares of common stock from us in a private placement for an aggregate purchase price of \$10.0 million and received a warrant to purchase 416,667 shares of common stock at an exercise price of \$6.00 per share.

In November 2021, entities affiliated with AIGH Investment Partners, LP purchased an aggregate of 2,930,000 shares of common stock from us in a private placement for an aggregate purchase price of \$14.7 million and received warrants to purchase an aggregate of 610,417 shares of common stock at an exercise price of \$6.00 per share.

In June 2022, Phorm purchased 500,000 shares of common stock from us in a private placement for an aggregate purchase price of \$2.5 million and received a warrant to purchase 104,167 shares of common stock at an exercise price of \$6.00 per share.

In June 2022, SAS purchased 1,000,000 shares of common stock from us in a private placement for an aggregate purchase price of \$5.0 million and received a warrant to purchase 208,333 shares of common stock at an exercise price of \$6.00 per share.

In June 2022, entities affiliated with AIGH Investment Partners, LP purchased an aggregate of 1,464,999 shares of common stock from us in a private placement for an aggregate purchase price of \$7.3 million and received warrants to purchase an aggregate of 305,209 shares of common stock at an exercise price of \$6.00 per share.

In April 2023, we entered into warrant exercise inducement offer letters with SAS and entities affiliated with AIGH Investment Partners, LP, pursuant to which such warrant holders agreed to exercise, for cash, then outstanding warrants to purchase, in the aggregate, 1,665,626 shares of common stock (the “Existing Warrant Shares”), in exchange for our agreement to (i) lower the exercise price of such warrants to \$4.00 per share and (ii) issue new warrants (the “Inducement Warrants”) to purchase, in the aggregate, up to 2,082,033 shares of common stock at an exercise price of \$5.00 per share. We received aggregate gross proceeds of approximately \$6.7 million from the exercise of such warrants.

Indemnification Agreement

We are party to an indemnification agreement with Phorm, pursuant to which we will indemnify Phorm and its affiliates (including their respective directors, officers, managers, controlling persons and employees) and the members of our board of directors designated by Phorm (each, a “Phorm Designee”) against liabilities arising in connection with, among other things, (i) Phorm’s acquisition and ownership of our common stock and involvement in the merger of Peninsula Acquisition Sub, Inc. with and into Transphorm Technology, (ii) Phorm and its affiliates’ provision of financial advisory, investment banking, syndication, monitoring and management consulting services to us and/or our subsidiaries (including in connection with any future offer or sale of securities of us or any of our subsidiaries), and (iii) any Phorm Designee’s service on our board of directors or the board of directors of any of our subsidiaries.

Stockholders Agreement

We are party to a stockholders agreement with Phorm (the “Phorm Stockholders Agreement”), pursuant to which we are required to take all necessary action for individuals designated by Phorm to be included in the slate of nominees recommended by the board of directors for election by our stockholders. Under the Phorm Stockholders Agreement, Phorm has the right to nominate (i) a majority of the board so long as it beneficially owns at least 40% of our then-outstanding shares of common stock, (ii) 33% of the directors (rounded up to the nearest whole number) so long as it beneficially owns at least 20% but less than 40% of our then-outstanding shares of common stock, and (iii) 10% of the directors (rounded up to the nearest whole number) so long as it beneficially owns at least 10% but less than 20% of our then-outstanding shares of common stock. The Phorm Stockholders Agreement also provides that so long as Phorm beneficially owns 20% or more of our then-outstanding shares of common stock, we will agree to take all necessary action to cause a Phorm Designee to serve as chair of the board of directors. The Phorm

Stockholders Agreement also provides that Phorm may nominate at least one member of each committee that may be established by the board of directors. Phorm may assign these and other governance rights to certain transferees.

Registration Rights Agreement

In November 2021, we entered into a registration rights agreement with the investors that purchased our common stock in a private placement, including Phorm, SAS and entities affiliated with AIGH Investment Partners, LP. Pursuant to the registration rights agreement, we are required to file a registration statement with the SEC covering the resale of registrable shares held by such investors and use commercially reasonable efforts to keep such registration statement effective for up to three years from the date it is declared effective by the SEC. Subject to customary exceptions, if we fail to maintain the effectiveness of the registration statement or if trading of our common stock is suspended or halted for more than three full, consecutive trading days, we agreed to make payments to each holder of registrable shares, as liquidated damages, a cash sum calculated at a rate equal to 12% per annum of the total value of registrable shares held or purchased by such holder and affected during the period, based on the monetary values assigned in the registration rights agreement, provided that the maximum amount of liquidated damages paid by us will not exceed 5% of the aggregate value of such holder's registrable shares (with such value based on the monetary values assigned in the registration rights agreement) that are affected by our failure to maintain the effectiveness of the registration statement or by the suspension of trading of our common stock.

Relationship with Nexperia

The description set forth in Item 1 of this Report under "Business—Nexperia Cooperation Agreement" is incorporated herein by reference.

Relationship with Yaskawa

In October 2021, Yaskawa converted the outstanding principal amount (plus accrued but unpaid interest) under a convertible promissory note, which as of the conversion date totaled \$15.6 million, into an aggregate of 3,120,000 shares of common stock. In connection with Yaskawa's agreement to convert the promissory note, we issued to Yaskawa a warrant to purchase 650,000 shares of common stock at an exercise price of \$6.00 per share.

Director Independence

Our board of directors has determined that Julian Humphreys, Katharina McFarland, Cynthia (Cindi) Moreland and Kelly Smales are independent directors under the Nasdaq Listing Rules. The Nasdaq independence definition includes a series of objective tests, such as that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of the director's family members has engaged in various types of business dealings with us. In addition, our board of directors has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our board of directors reviewed and discussed information provided by the directors with regard to each director's business and personal activities and relationships as they may relate to us and our management. In considering the independence of the directors listed above, our board of directors considered the relationship of our directors with the holders of more than 5% of our common stock.

Item 14. Principal Accountant Fees and Services.

In accordance with its charter, the audit committee approves in advance all audit and permissible non-audit services that will be provided by Marcum LLP, our independent registered public accounting firm.

The following table presents fees billed for professional audit services and other services rendered by Marcum LLP with respect to the years ended March 31, 2023 and 2022.

	Year Ended March 31,	
	2023	2022
Audit fees (1)	\$ 717,249	\$ 429,108
Audit-related fees (2)	90,500	—
Tax Fees	—	—
All other fees	—	—
Total	\$ 807,749	\$ 429,108

(1) Audit fees consist of fees billed for professional services provided in connection with the audit of our annual consolidated financial statements and the review of our quarterly consolidated financial statements and audit services provided in connection with other statutory and regulatory filings.

(2) Audit-related fees consist of fees for professional services provided in connection with registration statements and comfort letters in connection with regulatory filings and contractual arrangements.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:

1. Financial Statements: See Item 8 of this Annual Report on Form 10-K.
2. Financial Statement Schedules: All schedules are omitted because they are not required, are not applicable or the information is included in the consolidated financial statements or notes thereto.

(b) The following exhibits are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:

Exhibit Number	Exhibit Description	Filed with this Report	Incorporated by Reference			SEC File No.
			Form	Exhibit No.	Filing Date	
2.1†	Agreement and Plan of Merger and Reorganization, dated February 12, 2020, by and among the Registrant, Peninsula Acquisition Sub, Inc. and Transphorm Technology		8-K	2.1	February 14, 2020	000-55832
3.1	Certificate of Merger relating to the merger of Peninsula Acquisition Sub, Inc. with and into Transphorm Technology, filed with the Secretary of State of Delaware on February 12, 2020		8-K	3.1	February 14, 2020	000-55832
3.2	Certificate of Amendment to Certificate of Incorporation, filed with the Secretary of State of Delaware on February 12, 2020		8-K	3.2	February 14, 2020	000-55832
3.3	Amended and Restated Certificate of Incorporation of the Registrant		10-Q	3.1	August 11, 2020	000-55832
3.4	Amended and Restated Bylaws of the Registrant		8-K	3.1	June 3, 2020	000-55832
4.1	Specimen common stock certificate of the Registrant		10-K	4.4	March 11, 2021	000-55832
4.2	Description of Registrant's securities	X				
4.3	Stockholders Agreement, dated February 12, 2020, by and between the Registrant and KKR Phorm Investors L.P.		8-K	4.2	February 14, 2020	000-55832
4.4.1*	Form of Registration Rights Agreement, effective as of February 12, 2020		8-K	4.1	February 14, 2020	000-55832
4.4.2	Amendment to Registration Rights Agreement		10-Q	4.1.1	May 14, 2020	000-55832
4.5*	Registration Rights Agreement, dated December 23, 2020, by and between the Registrant and the signatories thereto		8-K	4.1	December 30, 2020	000-55832
4.6	Form of Registration Rights Agreement, dated November 5, 2021		8-K	10.2	November 9, 2021	000-55832
4.7	Form of Registration Rights Agreement, dated December 7, 2021		8-K	10.2	December 10, 2021	000-55832
4.8	Form of Registration Rights Agreement, dated April 3, 2023		8-K	10.3	April 3, 2023	001-41295
4.9.1*	Warrant to Purchase Shares of Series Preferred Stock, dated November 3, 2010, by and between Transphorm Technology and Leader Equity, LLC ("Leader Warrant")		8-K	10.21.1	February 14, 2020	000-55832
4.9.2	Letter Amendment to Leader Warrant, dated May 21, 2015, by and between Transphorm Technology and Leader Ventures, LLC		8-K	10.21.2	February 14, 2020	000-55832
4.9.3	Amendment to Leader Warrant, dated February 4, 2020, by and between Transphorm Technology and Leader Ventures, LLC		8-K	10.21.3	February 14, 2020	000-55832

4.10.1	Plain English Warrant Agreement, dated November 3, 2010, by and between Transphorm Technology and TriplePoint Capital, LLC (“First TriplePoint Warrant”)	8-K	10.22.1	February 14, 2020	000-55832
4.10.2	Plain English Warrant Agreement, dated December 2, 2010, by and between Transphorm Technology and TriplePoint Capital, LLC (“Second TriplePoint Warrant”)	8-K	10.22.2	February 14, 2020	000-55832
4.10.3	Letter Amendment to First TriplePoint Warrant and Second TriplePoint Warrant, dated May 20, 2015, by and between Transphorm Technology and TriplePoint Capital LLC	8-K	10.22.3	February 14, 2020	000-55832
4.10.4	Amendment to First TriplePoint Warrant, dated February 10, 2020, by and between Transphorm Technology and TriplePoint Capital LLC	8-K	10.22.4	February 14, 2020	000-55832
4.10.5	Amendment to Second TriplePoint Warrant, dated February 10, 2020, by and between Transphorm Technology and TriplePoint Capital LLC	8-K	10.22.5	February 14, 2020	000-55832
4.11	Form of Placement Agent Warrant, dated December 23, 2020	8-K	10.2	December 30, 2020	000-55832
4.12	Warrant to Purchase Shares of Common Stock of Transphorm, Inc., dated October 4, 2021, issued to Yaskawa Electric Corporation	8-K	10.2	October 7, 2021	000-55832
4.13	Form of Warrant to Purchase Shares of Common Stock, issued November 5, 2021, November 9, 2021 and June 2, 2022	8-K	4.1	November 9, 2021	000-55832
4.14	Form of Warrant to Purchase Shares of Common Stock, issued December 7, 2021 and December 10, 2021	8-K	4.1	December 10, 2021	000-55832
4.15	Form of Warrant to Purchase Shares of Common Stock, issued February 10, 2022	10-K	4.15	June 29, 2022	001-41295
4.16	Form of Inducement Warrant to Purchase Shares of Common Stock, issued April 3, 2023	8-K	4.1	April 3, 2023	001-41295
4.17	Form of Warrant to Purchase Shares of Common Stock, issued April 3, 2023	8-K	4.2	April 3, 2023	001-41295
10.1.1#	2007 Stock Plan	8-K	10.3.1	February 14, 2020	000-55832
10.1.2#	Form of Stock Option Agreement under 2007 Stock Plan	8-K	10.3.2	February 14, 2020	000-55832
10.2.1#	2015 Equity Incentive Plan	8-K	10.4.1	February 14, 2020	000-55832
10.2.2#	Form of Stock Option Agreement under 2015 Equity Incentive Plan	8-K	10.4.2	February 14, 2020	000-55832
10.3.1#	2020 Equity Incentive Plan	10-Q	10.2	February 11, 2022	000-55832
10.3.2#	Form of Stock Option Agreement under 2020 Equity Incentive Plan	10-Q	10.5.2	May 14, 2020	000-55832
10.3.3#	Form of Restricted Stock Unit Agreement under 2020 Equity Incentive Plan	10-Q	10.1	February 11, 2022	000-55832
10.4#	Transition and Separation Agreement, dated May 11, 2023, by and between Registrant and Mario Rivas	8-K	10.1	May 12, 2023	001-41295
10.5#	Offer Letter, dated as of March 22, 2007, by and between Transphorm Technology and Primit Parikh	8-K	10.9	February 14, 2020	000-55832
10.6#	Offer Letter, dated as of October 14, 2015, by and between Transphorm Technology and Cameron McAulay	8-K	10.10	February 14, 2020	000-55832
10.7	Form of Director and Officer Indemnification Agreement	8-K	10.18	February 14, 2020	000-55832
10.8	Form of Pre-Merger Indemnity Agreement	8-K	10.19	February 14, 2020	000-55832
10.9	Indemnification Agreement, dated February 12, 2020, by and between Registrant and KKR Phorm Investors L.P.	8-K	10.28	February 14, 2020	000-55832

10.10.1†	Award Contract, dated December 13, 2018, by and between Transphorm Technology and Naval Air Warfare Center Aircraft Division	8-K	10.11.1	February 14, 2020	000-55832
10.10.2†	Amendment of Solicitation, dated February 14, 2019, by and between Transphorm Technology and Naval Air Warfare Center Aircraft Division	8-K	10.11.2	February 14, 2020	000-55832
10.10.3†	Amendment of Solicitation, dated June 6, 2019, by and between Transphorm Technology and Naval Air Warfare Center Aircraft Division	8-K	10.11.3	February 14, 2020	000-55832
10.10.4†	Amendment of Solicitation, dated September 12, 2019, by and between Transphorm Technology and Naval Air Warfare Center Aircraft Division	8-K	10.11.4	February 14, 2020	000-55832
10.10.5†	Amendment of Solicitation, dated November 27, 2019, by and between Transphorm Technology and Naval Air Warfare Center Aircraft Division	8-K	10.11.5	February 14, 2020	000-55832
10.11†*	Performer Agreement, dated as of May 17, 2023, by and between the Registrant and the National Security Technology Accelerator (NSTXL)	8-K	10.1	May 23, 2023	001-41295
10.12†	Amended and Restated Supply Agreement, dated May 18, 2021, between the Registrant and Nexperia	10-KT	10.13.3	June 24, 2021	000-55832
10.13	Amended and Restated Development and License Agreement, dated May 18, 2021, between the Registrant, Transphorm Technology and Nexperia	10-KT	10.15.4	June 24, 2021	000-55832
10.14†	Amended and Restated License Agreement, dated May 18, 2021, between the Registrant, Transphorm Japan Epi and Nexperia	10-KT	10.24.2	June 24, 2021	000-55832
10.15†	Strategic Cooperation Agreement, dated May 18, 2021, between the Registrant, Transphorm Technology, Transphorm Japan Epi and Nexperia	10-KT	10.25	June 24, 2021	000-55832
10.16†	Option Agreement, dated May 18, 2021, between the Registrant, Transphorm Technology, Transphorm Japan Epi and Nexperia	10-KT	10.26	June 24, 2021	000-55832
10.17.1	Standard Industrial/Commercial Multi-Tenant Lease, dated June 23, 2010, by and between Transphorm Technology and Castilian LLC, for the premises located at 75 Castilian Drive, Goleta, CA 93117	8-K	10.16.1	February 14, 2020	000-55832
10.17.2	First Amendment to Lease, dated January 22, 2016, by and between Transphorm Technology and Castilian, LLC, for the premises located at 75 Castilian Drive, Goleta, CA 93117	8-K	10.16.2	February 14, 2020	000-55832
10.18.1	Standard Industrial/Commercial Multi-Tenant Lease, dated October 14, 2008, by and between Transphorm Technology and Frieslander Holdings, LLC and Nederlander Holdings, LLC, for the premises located at 111 Castilian Drive, Suite B, Goleta, CA 93117	8-K	10.17.1	February 14, 2020	000-55832
10.18.2	First Amendment to Standard Industrial/Commercial Multi-Tenant Lease, dated March 17, 2009, by and between Transphorm Technology and Frieslander Holdings, LLC and Nederlander Holdings, LLC, for the premises located at 111 Castilian Drive, Suite B, Goleta, CA 93117	8-K	10.17.2	February 14, 2020	000-55832
10.18.3	Second Amendment to Standard Industrial/Commercial Multi-Tenant Lease, dated August 1, 2011, by and between Transphorm Technology and Frieslander Holdings, LLC and Nederlander Holdings, LLC, for the premises located at 115 Castilian Drive, Suite B, Goleta, CA 93117, formerly known as 111 Castilian Drive, Suite B, Goleta, CA 93117	8-K	10.17.3	February 14, 2020	000-55832

10.18.4	Third Amendment to Standard Industrial/ Commercial Multi-Tenant Lease, dated November 24, 2015, by and between Transphorm Technology and Frieslander Holdings, LLC and Nederlander Holdings, LLC, for the premises located at 115 Castilian Drive, Suite B, Goleta, CA 93117, formerly known as 111 Castilian Drive, Suite B, Goleta, CA 93117	8-K	10.17.4	February 14, 2020	000-55832
10.19.1†	License Agreement dated September 1, 2007, by and between Transphorm Technology and The Regents of the University of California	8-K	10.24.1	February 14, 2020	000-55832
10.19.2†	Eleventh Amendment to License Agreement dated October 29, 2019, by and between Transform Technology and the Regents of the University of California	8-K	10.24.2	February 14, 2020	000-55832
10.20†	Share Purchase Agreement, dated as of July 20, 2021, by and between Transphorm Aizu, Inc. and GaNovation, Pte. Ltd.	10-Q	10.2	November 15, 2021	000-55832
10.21†*	Joint Venture Agreement, dated as of December 20, 2020, by and between the Registrant and JCP Capital Management, LLC Limited	10-Q	10.3	November 15, 2021	000-55832
10.22†	Manufacturing and Supply Agreement, dated as of June 21, 2022, by and between the Registrant and GlobalWafers Co., Ltd.	8-K	10.1	June 27, 2022	001-41295
10.23	Form of Securities Purchase Agreement, dated December 7, 2021	8-K	10.1	December 10, 2021	000-55832
10.24	Form of Securities Purchase Agreement, dated April 3, 2023	8-K	10.2	April 3, 2023	001-41295
10.25	Form of Warrant Exercise Inducement Letter, dated March 31, 2023	8-K	10.1	April 3, 2023	001-41295
21.1	List of Subsidiaries	S-1	21.1	January 20, 2021	333-252269
23.1	Consent of Marcum LLP, Independent Registered Public Accounting Firm	X			
24.1	Power of Attorney (included on the signature page hereto)	X			
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of Sarbanes-Oxley Act of 2002	X			
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of Sarbanes-Oxley Act of 2002	X			
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
101.INS	Inline XBRL Instance Document	X			
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X			
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X			
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X			
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X			
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X			
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	X			

‡ Annexes, schedules and/or exhibits have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The Registrant hereby undertakes to furnish supplementally a copy of any of the omitted schedules and exhibits to the SEC on a confidential basis upon request.

* Annexes, schedules and/or exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Registrant hereby undertakes to furnish supplementally a copy of any of the omitted schedules and exhibits to the SEC on a confidential basis upon request.

Indicates management contract or compensatory plan.

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

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Transphorm, Inc.

Date: June 28, 2023

By: /s/ Primit Parikh

Primit Parikh

President and Chief Executive Officer

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Primit Parikh and Cameron McAulay and each of them, as his true and lawful attorney-in-fact and agent with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, the Report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Primit Parikh</u> Primit Parikh	President and Chief Executive Officer, Director (Principal Executive Officer)	June 28, 2023
<u>/s/ Cameron McAulay</u> Cameron McAulay	Chief Financial Officer (Principal Financial and Accounting Officer)	June 28, 2023
<u>/s/ Julian Humphreys</u> Julian Humphreys	Director	June 28, 2023
<u>/s/ Katharina McFarland</u> Katharina McFarland	Director	June 28, 2023
<u>/s/ Umesh Mishra</u> Umesh Mishra	Chief Technology Officer and Chair of the Board	June 28, 2023
<u>/s/ Cynthia Moreland</u> Cynthia Moreland	Director	June 28, 2023
<u>/s/ Kelly Smales</u> Kelly Smales	Director	June 28, 2023
<u>/s/ Eiji Yatagawa</u> Eiji Yatagawa	Director	June 28, 2023