

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2019

OR

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

Commission File Number 333-234305

**SiTime Corporation**

(Exact name of Registrant as specified in its Charter)

**Delaware**

(State or other jurisdiction of  
incorporation or organization)

5451 Patrick Henry Drive

Santa Clara, CA

(Address of principal executive offices)

02-0713868

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

95054

(Zip Code)

Registrant's telephone number, including area code: (408) 328-4400

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, \$0.0001 par value per share	SITM	The Nasdaq Stock Market LLC

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES  NO

The common stock of the registrant was not publicly traded as of the last business day of the registrant's second fiscal quarter ended June 30, 2019. The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant on November 21, 2019, the initial trading date of the registrant's common stock on the Nasdaq Global Market, was \$90,603,136, based on the closing price of the registrant's common stock on such date of \$18.65 per share.

The number of shares of Registrant's Common Stock outstanding as of February 28, 2020 was 15,060,542.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates by reference certain information from the registrant's definitive proxy statement for the 2020 Annual Meeting of Stockholders to be filed no later than 120 days after the conclusion of the registrant's fiscal year ended December 31, 2019.

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## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The information in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), which are subject to the “safe harbor” created by those sections. We may, in some cases, use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “objective,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would,” or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements in this report include, but are not limited to, statements about:

- our customer relationships and our ability to retain and expand our customer relationships and to achieve design wins;
- the success, cost, and timing of new products;
- our plans to introduce products into the clock IC market;
- our ability to address market and customer demands and to timely develop new or enhanced solutions to meet those demands;
- anticipated trends, challenges and growth in our business and the markets in which we operate, including pricing expectations;
- our expectations regarding our revenue, gross margin, and expenses;
- our expectations regarding dependence on our largest customer;
- the size and growth potential of the markets for our solutions, and our ability to serve and expand our presence in those markets;
- our plans to expand sales and marketing efforts through increased collaboration with our distributors, resellers, and contracted sales representatives, and our plans to introduce a self-service web portal as well as digital marketing campaigns for branding and lead generation;
- our goal to become the leading timing solution provider for advanced and challenging applications;
- our positioning of being designed into current systems as well as future products;
- our belief that our advanced packaging designs can fit in the smallest footprints in the industry;
- our expectations regarding competition in our existing and new markets;
- regulatory developments in the United States and foreign countries;
- the performance of our third-party suppliers and manufacturers;
- our and our customers’ ability to respond successfully to technological or industry developments;
- our ability to attract and retain key management personnel;
- intellectual property and related litigation;
- the adequacy and availability of our leased facilities;
- the accuracy of our estimates regarding capital requirements, expectations regarding renewal of loans, and needs for additional financing;
- our relationship with, and ownership percentage of, MegaChips Corporation (“MegaChips”);
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act; and
- our expectations regarding our ability to obtain, maintain, protect, and enforce intellectual property protection for our technology.

These forward-looking statements reflect our management's beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this report and are subject to risks and uncertainties. We discuss many of these risks in greater detail under "Risk Factors." Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We qualify all of the forward-looking statements in this prospectus by these cautionary statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations, except as required by law.

**Item 1. Business****Corporate Information**

We were incorporated in Delaware on December 3, 2003. Our principal executive offices are located at 5451 Patrick Henry Drive, Santa Clara, California 95054, and our telephone number is (408) 328-4400. Our corporate website address is [www.sitime.com](http://www.sitime.com). Information found on, or accessible through, our website is not a part of, and is not incorporated into, this Annual Report on Form 10-K. Unless the context requires otherwise, references in this Annual Report on Form 10-K to “SiTime,” “the company,” “we,” “us” and “our” refer to SiTime Corporation and its wholly-owned subsidiaries on a consolidated basis.

**Overview**

We are a leading provider of silicon timing solutions. Our timing solutions are the heartbeat of our customers’ electronic systems, solving complex timing problems and enabling industry-leading products. Our current solutions include various types of oscillators, as well as resonators and clock integrated circuits (“ICs”). We are focused on designing system-level timing solutions based entirely on silicon, in contrast to legacy quartz-based timing solutions, and designing and producing all components of a timing solution. We offer products differentiated by high performance and reliability, programmability, small size, low power consumption, temperature stability, and resilience to mechanical shock and vibration, at an optimum price. Our silicon-based timing solutions are designed to be resilient to extreme environmental interference. For Internet of Things (“IoT”) products, our silicon-based timing solutions have the advantage of offering high performance at optimal power consumption and size as our customers fit more functionality into smaller devices. For the automotive market, our solutions can be utilized in advanced driver assistance systems (“ADAS”) for self-driving cars, which require increased timing accuracy. We design sophisticated system-level timing solutions based entirely on silicon technology. Our all-silicon solutions are based on three fundamental areas of expertise: Microelectro mechanical systems (“MEMS”), analog mixed-signal design capabilities, and advanced system-level integration expertise.

**Industry Background*****Timing Solutions Enable Innovation and are Rapidly Evolving***

The ability to accurately measure and reference time has been essential to humankind’s greatest inventions and technological progress. Timing technology has continued to evolve over centuries, forming a critical aspect of broader technological advancement. Timing is the heartbeat of every digital electronic system, ensuring that the system runs smoothly and reliably by providing and distributing clock signals to various critical components such as CPUs, communication and interface chips, and radio frequency components. As electronics are expected to operate at higher performance levels in increasingly challenging environments, while also being more complex and footprint-constrained, we believe they will require more sophisticated timing solutions. For example, as 5G communications networks mature, we expect that they will require higher precision from a greater number of oscillators and timing devices.

***Key Building Blocks of Timing Solutions***

Timing solutions are comprised of three key building blocks: resonators, oscillators, and clock ICs. While simpler systems generally require only an external resonator coupled with a basic embedded oscillator circuit, more complex systems require advanced timing solutions that may integrate a variety of resonators, oscillators, and clock ICs in a single chip package. The complexity of these timing solutions increases significantly when the performance requirements of the systems that use them increase, such as electronic systems required to support the 5G communication network infrastructure.

The key building blocks of SiTime’s timing solutions are:

- Resonators – mechanical silicon structures that vibrate at a precise frequency and provide the core accuracy and stability in oscillator systems;
- Oscillators – active systems that combine resonators with analog mixed-signal ICs that cause the resonators to vibrate, generating accurate clock signals; and
- Clock ICs – integrated analog mixed-signal circuits such as phase-locked loops (“PLLs”), clock dividers, and drivers. Clock ICs require resonators and oscillators for timing references and may integrate these components into complex systems.

These three building blocks may be used individually or in combination, depending on the end product’s performance, price, and size requirements.

#### ***Limitations of Legacy Quartz-based Solutions***

For the past 70 years, quartz crystal has been the predominant technology of choice for resonators and will continue to play a role in the timing market. In a quartz oscillator, a quartz crystal resonator is paired with a silicon-based clock IC in a ceramic package. However, quartz timing devices, largely unchanged in decades, have many inherent limitations, including limited frequency ranges, sensitivity to vibration and mechanical shock, susceptibility to frequency jumps at particular temperatures, and limited programmability. In addition, quartz devices must be housed in ceramic packaging, and thus are difficult to integrate into standard semiconductor packages and require dedicated quartz manufacturing facilities. Quartz products also require relatively long lead times due to the need to specify various characteristics well in advance of production, without the ability to reconfigure them during the design cycle. In addition, as electronic systems become more complex, feature-rich, and robust, they require more sophisticated timing systems that can seamlessly integrate a variety of resonators, oscillators, and clock ICs in various system-level combinations. This seamless integration is more difficult with legacy quartz systems.

#### ***Silicon Timing Solutions Poised to Disrupt the Market***

In recent years, advances in silicon-based manufacturing and packaging techniques have allowed the development of alternatives to quartz crystal technology. We believe that silicon MEMS is an ideal process technology for resonator design. Specifically, its ability to integrate with other circuits in standard semiconductor packages has made scalable standard silicon manufacturing possible for resonator and broader timing technology. MEMS and silicon-based technologies are able to operate in a wide range of frequencies, are resistant to vibration, mechanical shock, and temperature changes, and are less susceptible to frequency jumps. These technologies are also inherently well-suited to produce timing solutions that are small in size, and offer high performance, robustness, and programmability. Timing solutions based on these technologies can be manufactured using fabless semiconductor processes and capacity, allowing for cost-effective high-volume manufacturing.

#### ***Significant Market Opportunity for Timing Solutions***

The overall timing market represents more than a \$7.7 billion opportunity as of 2018. Dedalus Consulting estimates that oscillators and standalone resonators represent approximately \$3.8 billion and \$2.9 billion total addressable markets, respectively. Based on our internal estimates, we believe clock ICs represent an approximate \$1.0 billion total addressable market. The overall timing market is expected to grow to approximately \$10.1 billion by 2024, representing a cumulative average growth rate (“CAGR”) of 4%. As a subset of the broader timing market, the market for MEMS oscillators is projected to grow from \$0.1 billion in 2018 to \$0.6 billion by 2024, representing a CAGR of 35.2%, according to Yole Développement.

## **The Opportunity for Advanced Solutions**

From high-power network infrastructure equipment to low-power battery-operated devices, precise timing solutions enable virtually all electronics. The complexity of such timing solutions increases significantly with the performance requirements of the systems in which they are used. Below are some examples of end markets where we believe our silicon-based timing is enabling greater functionality than legacy solutions:

### ***Telecommunications, Enterprise, and Cloud Infrastructure***

Communications infrastructure equipment used in wireless base stations, wired infrastructure equipment, enterprise networks, and cloud data centers must provide high performance and stability in demanding environments, which may include temperature fluctuations, mechanical shocks, and vibration. If the timing solution within the equipment fails, networks can shut down, leading to service disruptions and higher operating costs. IDC estimates that the worldwide 5G network infrastructure market is expected to be \$26 billion by 2022. According to Gartner, “Recent reports on 5G pilots and testing have identified a wide range of projected data throughput speeds ranging from 10 times up to 1,000 times faster than 4G. Other reports estimate ranges of one to 10 gigabytes per second.” Existing quartz-based timing technology requires expensive technology and significantly higher power requirements. With higher frequencies, tighter channels, and shorter range radios in wireless base stations, we believe there will be a greater demand for high-quality silicon-based timing solutions that perform well in demanding and harsh environments with lower power consumption. We believe silicon-based timing solutions also perform well in wired telecom, enterprise, and data center networks, ensuring synchronized performance levels at higher transmission speeds.

### ***Industrial***

Industrial equipment, ranging from factory machinery to medical devices, is often exposed to environments characterized by temperature fluctuation, mechanical shocks, and vibration. If the timing solution fails, many mission-critical processes can be disrupted, such as manufacturing processes or automated medical procedures. Increasing automation and proliferation of robotics will only amplify the need for stable timing in mission-critical applications. We believe silicon-based timing solutions can perform better than legacy quartz-based solutions in demanding industrial environments at comparable cost and with lower power consumption.

### ***Automotive***

For automotive applications, timing technology must perform well and be reliable over the life of an automobile in an environment characterized by vibration, mechanical shocks, electromagnetic interference, wide temperature ranges, and rapid temperature change. The growing electrification and advancement of self-driving technologies will continue to increase the requirements for timing devices. Toyota estimates that the “data volume between vehicles and the cloud will reach 10 exabytes per month around 2025, approximately 10,000 times larger than the present volume.” These communication systems will require precise timing. We believe silicon-based timing can address many of the challenges associated with this demanding automotive ecosystem due to increased resilience to shock and vibration and the ability to operate in extreme temperatures.

### ***IoT and Mobile***

The IoT revolution will enable the proliferation of billions of internet-connected devices in industrial and consumer applications. According to IHS Markit, the global installed base of IoT devices will increase from 27 billion in 2017 to 73 billion in 2025. These devices can range from personal wearable devices to electronics embedded in appliances and industrial machinery. Many of these devices need to package a significant amount of electronics in a limited battery-powered and size-constrained envelope, while still requiring high performance and high accuracy. Due to the ability to integrate with ICs, we believe silicon-based timing solutions are well-suited to optimize footprint, reliability, and power consumption of the overall system within IoT and mobile devices.

## *Aerospace and Defense*

Timing devices used in aerospace and defense applications such as rockets and satellites need to withstand extreme vibration forces and temperature gradients during operation. Quartz-based solutions can be impacted by extreme vibrating forces acting on the whole system. MEMS timing devices are well-suited for these applications, as they provide up to 40 times better stability under vibration than comparable quartz-based solutions.

### **Our Solutions and Technology**

To solve our customers' timing challenges, we focus on designing sophisticated system-level timing solutions based entirely on silicon technology. Our customers turn to us for our system-level expertise that allows us to integrate numerous timing building blocks into a single system, thereby optimizing performance, cost, and board space. As the performance requirements of electronic systems become more demanding and the design more complex, we believe we provide an important value proposition to our customers by helping them solve their most difficult system-level timing challenges.

Our silicon timing solutions are comprised of:

- **MEMS resonators:** We pioneered the MEMS-based timing industry with the MEMS First™, EpiSeal™, and TempFlat™ processes. These manufacturing and packaging processes have allowed the hermetically-sealed resonator die to be housed in industry-standard, low-cost plastic packages. These processes improve resonator stability, increase quality and reliability, and decrease aging effects. We believe our MEMS resonators are easy to integrate into silicon-based oscillators and clock ICs, and allow us to develop tightly-integrated high performance timing solutions.
- **Clock ICs:** We have a dedicated analog and mixed-signal engineering team focused on the most complex challenges related to oscillators and clock ICs. Our analog mixed-signal technologies include several innovative low-noise circuit-based oscillators, high-performance PLLs, low-noise data converters, and precision low-aging reference circuits. Many of our oscillators use temperature sensing to maximize frequency stability. Our low-power nano-ampere and high-resolution DualMEMS™ micro-kelvin-resolution sensing technologies stabilize our timing solutions despite rapid temperature changes. We also offer what we consider premier Allan deviation, power supply noise rejection, temperature-sensing resolution, and integrated phase jitter.
- **Advanced system-level integration:** We have extensive know-how in integrating various timing components into elegant system-level solutions. Our ability to integrate MEMS-based devices with analog mixed-signal products allows us to develop oscillators and clock ICs in diverse permutations, which helps us solve difficult timing challenges. Using advanced packaging designs, we believe we can design our products to fit in the smallest footprints in the industry.

We design each key building block of the timing system, from MEMS resonators to oscillator circuits to clock ICs. Our ability to combine our MEMS resonators with analog-mixed signal components in a fabless semiconductor supply chain allows us to build full timing solutions from the ground up, enabling our customers to focus on their core expertise.

Our solutions are programmable across multiple characteristics including frequencies, stability metrics, voltage parameters, and temperature ranges, among others. The inherent efficiency of our programmable platform allows us to replace legacy products with solutions that we believe are superior in performance at comparable cost, and to deliver differentiated timing solutions for our customers' next-generation products.

## Our Competitive Strengths

- **High performance:** Our portfolio of silicon-based MEMS timing products allows us to provide our customers with high performance solutions across a wide range of attributes including stability over temperature, vibration, phase jitter, and other metrics.
- **Small size:** Our solutions have a small footprint and package size, optimizing the end customer's board area. Additionally, many of our products have lower package height which is important for many systems.
- **Low power:** Our solutions operate at ultra-low power levels and are well-suited for portable battery-operated applications.
- **Programmability:** Our devices are configurable across a wide range of parameters, including frequency, stability metrics, voltage parameters, and temperature ranges, among others, resulting in design flexibility for the customer, and enabling us to produce a vast number of custom timing products on demand with short lead times.
- **High quality and reliability:** The combination of our design and manufacturing processes enables us to produce high quality products with long-term reliability. Our solutions offer low sensitivity to electromagnetic energy, mechanical shock, vibration, airflow, and temperature gradient.
- **Flexible integration:** Our MEMS resonators and clock ICs allow a wide range of packaging and integration methodologies to support various levels of size, cost, and electrical, thermal, and mechanical performance.
- **Leveraged product development:** Our solutions employ different combinations of MEMS and circuit components, enabling us to generate a vast number of custom part numbers, including over 30,000 uniquely programmable part numbers shipped as of December 31, 2019.
- **Rapid time to market:** Our solutions can typically be delivered within weeks of initial configuration, enabling us to reduce our end customers' time to market.

## Our Strategy

Our objective is to be the leading timing solution provider for advanced and challenging applications. Our solutions not only displace existing products by providing improved performance across a range of operational attributes, but also enable next-generation devices by providing high performance timing solutions at affordable price points. Key elements of our strategy include:

- **Extend our silicon-based timing leadership.** We intend to continue driving innovation in the timing market and working with our ecosystem partners to help set the timing standards of the future. We plan to improve the performance of our current solution suite across a variety of key metrics, including size, power, frequency stability, phase noise, and signal quality, while adding new functionality.
- **Advocate benefits of silicon technology.** We intend to continue to educate current and prospective customers about the benefits of our silicon timing systems solutions relative to their existing and future products.
- **Identify and promote new and emerging applications for our technologies.** We intend to continue to collaborate with our end customers to identify timing challenges related to their product roadmaps and to develop innovative solutions to help them realize these products.
- **Enable future technology innovation.** We plan to continue to apply our MEMS analog and mixed-signal, and systems expertise, as well as partner with leading technology companies to develop innovative products.
- **Broaden our product portfolio.** We intend to continue to broaden our product portfolio by offering additional varieties of oscillators, expanding our business in standalone resonators, and entering the clock IC market.

- **Continue to attract and acquire new customers.** We intend to expand our end customer base by focusing on direct dialogue with large strategic accounts as well as partnerships with large distributors and resellers. We believe this multi-track strategy will allow us to provide differentiated solutions to a broad array of customers.
- **Drive margin expansion of our products.** We intend to use our technological expertise to deliver higher value and higher margin products. In addition, we intend to continue to reduce our costs through operational improvements and supply-chain management initiatives.
- **Offer value on business metrics.** In addition to differentiating our solutions based on technical features and value, we also intend to provide value to our customers on business metrics by leveraging our fabless semiconductor infrastructure. These benefits may include shorter lead times, higher quality and reliability, and therefore lower cost of ownership for the end customer.

## Our Products

Our silicon timing products are designed to address a wide range of applications across a broad array of end markets. Our product portfolio encompasses oscillators and standalone resonators. We also began sampling clock ICs in the second quarter of 2019. The programmability of our product platforms enables us to generate solutions quickly to customer specifications, as evidenced by over 30,000 of our part numbers shipped as of December 31, 2019 derived from 65 product platforms, including 9 in MEMS, 16 in complementary metal-oxide semiconductors (“CMOS”) ICs, and 20 packaging options.

Today, we primarily supply oscillator products that are comprised of a MEMS resonator and a clock IC that are integrated into a package. The following table illustrates our current portfolio of promoted products by target end market:

Telecom & Networking Infrastructure	Industrial & Consumer	Automotive AEC-Q100	IoT & Mobile	Aerospace & Defense MIL-PRF-55310
Low Jitter Oscillators	Low Power Oscillators	Spread Spectrum Oscillators	µPower 32 kHz TCXO 1.2 mm <sup>2</sup>	TCXO/ VCTCXO/ DCTCXO
DCXO In-System Programmable	Spread Spectrum Oscillators	Low Jitter Oscillators	µPower 32 kHz Oscillators	Spread Spectrum Oscillators
VCXO	High Temp Oscillators	High Temp Oscillators	µPower TCXO 1.2 mm <sup>2</sup>	VCXO
TCXO/ VCTCXO/ DCTCXO	µPower Oscillators	TCXO/ VCTCXO/ DCTCXO	µPower Oscillators 1.2 mm <sup>2</sup>	High Temp Oscillators
OCXO				DCXO In-System Programmable
DCOCXO				

## **Our Customers**

We primarily sell our timing products to distributors and resellers, who in turn sell our products to our end customers. We work closely with our end customers throughout their design cycles and are able to develop long-term relationships as our technology becomes embedded in their products. As a result, we believe we are well-positioned to be designed into their current systems and to develop next generation solutions for their future products.

Quantek Technology Corporation (“Quantek”) directly accounted for 22% and 20% of our revenue for the years ended December 31, 2019 and 2018, respectively, Arrow Electronics, Inc. (“Arrow”) directly accounted for 19% and 18% of our revenue for the years ended December 31, 2019 and 2018, respectively, and Pemas Electronics Co., Ltd. (“Pemas”) directly accounted for 17% and 27% of our revenue for the years ended December 31, 2019 and 2018, respectively. Other than Quantek, Arrow, and Pemas, no other single customer accounted for more than 10% of our revenue in the years ended December 31, 2019 and December 31, 2018.

We primarily sell to distributors and resellers who identify the end customers that are purchasing our products. Based on the sell-through information provided to us, we believe that the majority of our products sold to Pemas and Quantek are in turn incorporated into products of Apple Inc. (“Apple”), our largest end customer. As a result, we believe revenue attributable to our largest end customer accounted for approximately 35% and 40% of our revenue for the years ended December 31, 2019 and 2018, respectively.

## **Sales and Marketing**

Our customers’ design cycle from initial engagement to volume shipment typically ranges from six months to three years, with product life cycles of ten years or more. For many of our products, early engagement with our customers’ technical staff is critical for success. To ensure an adequate level of early engagement, our sales, marketing, and customer and development engineers work closely with our customers and channel partners to understand, identify, and propose solutions to their systems’ challenges. We work closely with our customers, including technology leaders such as Nokia for the communications markets, to anticipate end customer market needs. In some cases, we work with our end customers to better understand the end customers’ market trends and new requirements that are being placed on our customers.

We sell our products worldwide through multiple channels, including our direct sales force and a network of distributors, contract manufacturers, resellers, and independent design houses. Our global sales strategy includes direct sales and distributors covering over 10,000 end customer accounts.

We have a strategic accounts strategy with dedicated account owners and our direct sales force focused on key decision-makers to provide high-value solutions for unique customer requirements. We intend to continue to expand our sales and marketing efforts through increased collaboration with our distributors, resellers, and contracted sales representatives. In addition, we intend to introduce a self-service web portal, which will support 24/7 availability and leverage an inside sales team to support a “self-service model” for customers.

We promote our products and brand through various means including press releases, online advertising, direct e-mail campaigns, speaking opportunities, contributed articles, trade events, and industry analyst relations.

## **Manufacturing**

We operate a fables business model and use third-party foundries and assembly and test contractors to manufacture, assemble and test our semiconductor products. This outsourced manufacturing approach allows us to focus our resources on the design, sale, and marketing of our products. In addition, we believe that outsourcing many of our manufacturing and assembly activities provides us with the flexibility needed to respond to new market opportunities and scale for customer demand, simplifies our operations, and significantly reduces our capital commitments.

We subject our third-party manufacturing contractors to rigorous qualification requirements to meet the high quality and reliability standards required of our products. We carefully qualify each of our partners and their processes before applying the technology to our products. Our engineers work closely with our foundries and other contractors to increase yield, lower manufacturing costs, and improve product quality.

- **Fabrication.** We currently utilize a range of semiconductor process generations to develop and manufacture our products. We use Robert Bosch LLC (“Bosch”) in Germany and Taiwan Semiconductor Manufacturing Company (“TSMC”) in Taiwan as our primary foundries and suppliers for our MEMS timing devices and analog circuits, respectively.
- **Package, Assembly and Testing.** Upon the completion of processing at the foundry, we use third-party contractors for packaging, assembly and testing, including Advanced Semiconductor Engineering, Inc. (“ASE”), Carsem (M) Sdn. Bhd. (“Carsem”), and United Test and Assembly Center Ltd. (“UTAC”) in Taiwan, Malaysia, and Thailand, as well as Daishinku Corp. (“Daishinku”) and UTAC for ceramic packaging for some of our products.
- **Warehousing.** Our products are warehoused at our Outsourced Semiconductor Assembly and Test, facilities located in Malaysia, Taiwan, and Thailand.

On February 23, 2017, we entered into an amended and restated manufacturing agreement with Bosch, which was amended on August 1, 2018 (the “Supply Agreement”). Under the Supply Agreement, Bosch has agreed to fabricate our MEMS wafers on the basis of purchase orders placed by us from time to time. Bosch has discretion whether to accept our purchase orders, and we can terminate purchase orders for convenience by giving written notice prior to shipment. The initial term of the Supply Agreement is for ten years through February 2027 and automatically renews unless terminated by either party with three years’ advance notice beginning in February 2024. Other than Bosch, we do not have long-term supply agreements with most of our third-party manufacturing contractors, and we purchase products on a purchase order basis.

## Research and Development

We believe that our future success depends on our ability to introduce enhancements on our existing products and to develop new products for both existing and new markets. As a result, a significant majority of our operating expenses has been allocated towards this effort. Our research and development efforts are focused primarily on MEMS and advanced clock IC design and advanced system-level integration.

We have assembled a core team of experienced engineers and systems designers who conduct research and development activities in the United States, the Netherlands, and Ukraine. As of December 31, 2019, we had 72 engineers worldwide (representing approximately 50% of our total employee base).

## Intellectual Property

We rely primarily on patent, copyright, trademark, and trade secret laws, as well as confidentiality and non-disclosure agreements, and other contractual protections, to protect our technologies and proprietary know-how. As of December 31, 2019, we had 59 issued U.S. patents, expiring generally between 2026 and 2036, and 32 pending U.S. patent applications (including three provisional applications). Our issued patents and pending patent applications generally relate to our MEMS fabrication process, MEMS resonators, circuits, packaging, and oscillator systems. In addition to our own intellectual property, we also use third-party licenses for certain technologies embedded in our MEMS solutions.

We generally control access to and use of our confidential information and trade secrets through the use of internal and external controls, including contractual protections with employees, contractors, and customers. We rely in part on the laws of the United States and international laws to protect our work. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship. However, we cannot guarantee that we have entered into such agreements with every such party and we may not have adequate remedies in case of a breach of any such agreements. Our trade secrets could be disclosed to our competitors or others may independently develop substantially equivalent technologies or otherwise gain access to our trade secrets. Trade secrets can be difficult to protect and some courts inside and outside of the United States are less willing or unwilling to protect trade secrets.

Despite our efforts to protect our intellectual property, unauthorized parties may still copy, misappropriate, or otherwise obtain and use our software, technology, or other information that we regard as our proprietary intellectual property. In addition, we intend to expand our international operations, and effective patent, copyright, trademark, and trade secret, and other intellectual property protection may not be available or may be limited in some foreign countries.

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. We have in the past received, and we may in the future receive, communications alleging liability for damages or challenging the validity of our intellectual property or proprietary rights. For example, in March 2019, VTT Technical Research Centre of Finland, Ltd. filed suit in the United States District Court for the Northern District of California alleging infringement by us of a U.S. patent. For more information regarding this matter, see “Item 3—Legal Proceedings.” Any litigation, regardless of success or merit, could cause us to incur substantial expenses, reduce our sales, and divert the efforts of our management and other personnel. In the event we receive an adverse result in any litigation, we could be required to pay substantial damages, seek licenses from third parties, which may not be available on reasonable terms or at all, cease sale of products, expend significant resources to develop alternative technology, or discontinue the use of processes requiring the relevant technology.

## **Competition**

The global semiconductor market in general, and the timing market in particular, is highly competitive. We compete in different target markets on the basis of a number of competitive factors. We expect competition to increase and intensify as additional companies enter our markets and as internal resources of large original equipment manufacturers (“OEMs”) grow. Increased competition could result in price pressure, reduced gross margins, and loss of market share, any of which could harm our business, financial condition, and results of operations.

Our competitors range from large, international companies offering a wide range of timing products to smaller companies specializing in narrow market verticals. In the MEMS-based oscillator market, we primarily compete against Microchip Technology Inc. (“MCHP”). In the analog mixed-signal IC and clocking market, we primarily compete against Renesas Electronics Corporation (through their acquisition of Integrated Device Technology, Inc.), Silicon Laboratories Inc., Texas Instruments Incorporated, Microsemi Corporation (which is owned by MCHP), and Analog Devices, Inc. In the oscillator market, we primarily compete against quartz crystal suppliers such as Rakon Limited, Daishinku, Nihon Dempa Kogyo Co., Ltd., TXC Corporation, Seiko Epson Corporation, and Vectron International (which is owned by MCHP). These quartz crystal suppliers typically own their own quartz manufacturing facilities.

Our ability to compete successfully depends on elements both within and outside of our control, including industry and general economic trends. During past periods of downturns in our industry, competition in the markets in which we operate intensified as our customers reduced their purchase orders. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support, and other resources, are more established than we are, and have significantly better brand recognition and broader product offerings which may enable them to better withstand similar adverse economic or market conditions in the future. Any such development may materially and adversely affect our current and future target markets and our ability to compete successfully in those markets. We maintain our competitive position through our ability to successfully design, develop, and market complex timing solutions for the customers we serve.

## **Employees**

As of December 31, 2019, we had 143 full-time equivalent employees located in the United States, Malaysia, the Netherlands, Taiwan, Japan and Ukraine, including 72 in research and development, 55 in sales, general and administrative, and 16 in operations. We consider relations with our employees to be good and have never experienced a work stoppage. None of our employees are either represented by a labor union or subject to a collective bargaining agreement.

## Executive Officers of the Registrant

The following table sets forth information regarding our executive officers as of December 31, 2019:

Name	Age	Position
Rajesh Vashist	62	Chief Executive Officer and Director
Arthur D. Chadwick	63	Executive Vice President, Chief Financial Officer
Lionel Bonnot	52	Executive Vice President, Worldwide Sales and Business Development
Piyush B. Sevalia	51	Executive Vice President, Marketing

*Rajesh Vashist* has served as our Chief Executive Officer and as a member of our board of directors since September 2007 and as Chairman of our board of directors since November 2019. Prior to joining SiTime, Mr. Vashist served as chief executive officer and chairman of the board of directors of Ikanos Communications, Inc., a semiconductor and software development company, from July 1999 to October 2006. Mr. Vashist holds a B.S. in engineering from NIT Rourkela in India and a MBA from Marquette University.

*Arthur D. Chadwick* has served as our Executive Vice President, Chief Financial Officer since September 2019. Prior to joining SiTime, from December 2004 to July 2018, Mr. Chadwick served as vice president of finance and administration, and chief financial officer of Cavium, Inc., a fabless semiconductor company that was listed on Nasdaq and subsequently acquired by Marvell Technology Group Ltd. in July 2018. From January 1989 to October 2004, Mr. Chadwick served as senior vice president of finance and administration, and chief financial officer of Pinnacle Systems Inc., a digital video editing company that was listed on Nasdaq and acquired by Avid Technology, Inc. in August 2005. Prior to 1989, Mr. Chadwick has held positions at Gould Semiconductor, ams AG, and American Microsystems. Mr. Chadwick holds a B.S. in Mathematics and Physics and a MBA in finance, both from the University of Michigan.

*Lionel Bonnot* has served as our Executive Vice President of Worldwide Sales and Business Development since July 2019 and as Executive Vice President of Business Development from February 2018 to July 2019. Prior to joining SiTime, Mr. Bonnot was at Quantenna Communications (Nasdaq: QTNA), a wireless communication solution company that designs and develops radio frequency and digital Wi-Fi chips, from December 2007 to December 2017. During his 10-year tenure at Quantenna, Mr. Bonnot served as vice president of worldwide sales, senior vice president of business development, and most recently as senior vice president of marketing and business development. Mr. Bonnot also held various positions at Ikanos Communications, Inc., a semiconductor and software development company, from December 2001 to December 2007, including vice president of Europe, vice president of sales for North America and EMEA, and senior director of worldwide sales. Mr. Bonnot holds a M.S. in Computer Science from Ecole Nationale Supérieure d'Informatique in Paris, France.

*Piyush B. Sevalia* has served as our Executive Vice President of Marketing since April 2012. Mr. Sevalia previously served as our Vice President of Marketing from March 2008 to April 2012. Prior to joining SiTime, Mr. Sevalia held various marketing positions at Ikanos Communications, a semiconductor and software development company, including vice president of access infrastructure products from October 2006 to March 2008, marketing head of access products from April 2006 to September 2006, and director of product marketing from September 2000 to March 2006. From July 1991 to September 2000, Mr. Sevalia held various positions at Cypress Semiconductor, a semiconductor company, including senior marketing manager, strategic marketing manager, senior / staff applications engineer, and applications engineer. Mr. Sevalia holds a bachelor's degree in electrical engineering from the University of Mumbai, a master's degree in electrical engineering from the University of Michigan, and a master's degree in business administration from the University of California, Berkeley.

## Available Information

Our website is located at <https://www.sitime.com>. Copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, are available, free of charge, on our investor relations website as soon as reasonably practicable after we file such material electronically with or furnish it to the Securities and Exchange Commission (the "SEC"). The SEC also maintains a website that contains our SEC filings. The address of the site is [www.sec.gov](http://www.sec.gov).

## Item 1A. Risk Factors.

### Risks Related to Our Business and Our Industry

***We currently depend on one end customer for a large portion of our revenue. The loss of, or a significant reduction in orders from our customers, including this end customer, could significantly reduce our revenue and adversely impact our operating results.***

We believe that our operating results for the foreseeable future will continue to depend to a significant extent on revenue attributable to Apple, our largest end customer. Sales attributable to this end customer have historically accounted for a large portion of our revenue and accounted for approximately 35% and 40% of our revenue for the years ended December 31, 2019 and 2018, respectively. Revenue attributable to this end customer has decreased in absolute dollars and as a percentage of revenue from 2018 to 2019. We anticipate revenue attributable to this customer will fluctuate from period to period, although we expect to remain dependent on this end customer for a substantial portion of our revenue for the foreseeable future. Although we sell our products to this customer through distributors on a purchase order basis, including Pernas, Arrow, and Quantek, we have a development and supply agreement, which provides a general framework for our transactions with Apple. This agreement continues until either party terminates for material breach. Under this agreement, we have agreed to develop and deliver new products to this end customer at its request, provided it also meets our business purposes, and have agreed to indemnify it for intellectual property infringement or any injury or damages caused by our products. This end customer does not have any minimum or binding purchase obligations to us under this agreement and could elect to discontinue making purchases from us with little or no notice. If our end customers were to choose to work with other manufacturers or our relationships with our customers is disrupted for any reason, it could have a significant negative impact on our business. Any reduction in sales attributable to our larger customers, including our largest end customer, would have a significant and disproportionate impact on our business, financial condition, and results of operations.

Because our sales are made pursuant to standard purchase orders, orders may be cancelled, reduced, or rescheduled with little or no notice and without penalty. Cancellations of orders could result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses. In addition, changes in forecasts or the timing of orders from our customers expose us to the risks of inventory shortages or excess inventory. This in turn could cause our operating results to fluctuate. For example, in 2018 we incurred approximately \$8.0 million in cost of inventory in anticipation of an order that did not materialize. This resulted in an inventory write-down of approximately \$8.0 million for 2018. We were able to sell approximately \$3.0 million of such inventory in the fourth quarter of 2018 and approximately \$2.5 million of such inventory in the year ended December 31, 2019.

Our end customers, or the distributors through which we sell to these customers, may choose to use products in addition to ours, use a different product altogether, or develop an in-house solution. Any of these events could significantly harm our business, financial condition, and results of operations. In addition, if our distributors' relationships with our end customers, including our larger end customers, are disrupted for inability to deliver sufficient products or for any other reason, it could have a significant negative impact on our business, financial condition, and results of operations.

***If we are unable to expand or further diversify our customer base, our business, financial condition, and results of operations could suffer.***

We sell our products primarily through distributors and resellers, who in turn sell to our end customers. For the years ended December 31, 2019 and 2018, our top three distributors by revenue together accounted for approximately 59% and 65% of our revenue, respectively. Based on our shipment information, we believe that revenue attributable to our top ten end customers accounted for 57% and 60% of our revenue in 2019 and 2018, respectively. Sales attributable to our largest end customer accounted for approximately 35% and 40%, of our revenue for the years ended December 31, 2019 and 2018, respectively. We expect the composition of our top end customers to vary from period to period, and that revenue attributable to our top ten end customers in any given period may decline over time. Our relationships with existing customers may deter potential customers who compete with these customers from buying our silicon timing systems solutions. If we are unable to expand or further diversify our customer base, it could harm our business, financial condition, and results of operations.

***Because we do not have long-term purchase commitments with our customers, orders may be cancelled, reduced, or rescheduled with little or no notice, which in turn exposes us to inventory risk, and may cause our business and results of operations to suffer.***

We sell our products primarily through distributors and resellers, with no long-term or minimum purchase commitments from them or their end customers. Substantially all of our sales to date have been made on a purchase order basis, which orders may be cancelled, changed, or rescheduled with little or no notice or penalty. As a result, our revenue and operating results could fluctuate materially and could be materially and disproportionately impacted by purchasing decisions of our customers, including our larger customers. In the future, our distributors or their end customers may decide to purchase fewer units than they have in the past, may alter their purchasing patterns at any time with limited or no notice, or may decide not to continue to purchase our silicon timing systems solutions at all, any of which could cause our revenue to decline materially and materially harm our business, financial condition, and results of operations. Cancellations of, reductions in, or rescheduling of customer orders could also result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses, as a substantial portion of our expenses are fixed at least in the short term. In addition, changes in forecasts or the timing of orders expose us to the risks of inventory shortages or excess inventory. As we no longer intend to acquire inventory to pre-build custom products, we may not be able to fulfill increased demand, at least in the short term. Any of the foregoing events could materially and adversely affect our business, financial condition, and results of operations.

***Our revenue and operating results may fluctuate from period to period, which could cause our stock price to fluctuate.***

Our revenue and operating results have fluctuated in the past and may fluctuate from period to period in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include the following factors, as well as other factors described elsewhere in this prospectus:

- customer demand and product life cycles;
- the receipt, reduction, or cancellation of, or changes in the forecasts or timing of, orders by customers;
- fluctuations in the levels of inventories held by our distributors or end customers;
- the gain or loss of significant customers;
- market acceptance of our products and our customers' products;
- our ability to develop, introduce, and market new products and technologies on a timely basis;
- the timing and extent of product development costs;
- new product announcements and introductions by us or our competitors;
- our research and development costs and related new product expenditures and our ability to achieve cost reductions in a timely or predictable manner;
- seasonality and fluctuations in sales by product manufacturers that incorporate our silicon timing systems solutions into their products;
- end-market demand into which we have limited insight, including cyclical, seasonality, and the competitive landscape;
- cyclical fluctuations in the semiconductor market;
- fluctuations in our manufacturing yields;
- significant warranty claims, including those not covered by our suppliers;
- changes in our pricing, product cost, and product mix; and
- supply chain disruptions, delays, shortages, and capacity limitations.

As a result of these and other factors, you should not rely on the results of any prior quarterly or annual periods, or any historical trends reflected in such results, as indications of our future revenue or operating performance. Fluctuations in our revenue and operating results could cause our stock price to decline and, as a result, you may lose some or all of your investment.

***We have an accumulated deficit and have incurred net losses in the past, and we may continue to incur net losses in the future.***

As of December 31, 2019 and 2018, we had an accumulated deficit of \$54.0 million and \$47.4 million, respectively. We generated net losses of \$6.6 million and \$9.3 million in 2019 and 2018, respectively. The loss in 2018 was primarily attributable to a reduction in revenue from our largest end customer and inventory write-down. The loss in 2019 was primarily due to a decrease in revenue from customers in Asia primarily as a result of lower sales volume, as well as a reduction in revenue from our largest end customer. We may continue to incur net losses in the future.

We expect to continue to make significant investments to support our research and development, sales and marketing and general and administrative functions. As a public company, we also continue to incur significant additional legal, accounting and other expenses. If our revenue growth does not exceed the growth of these anticipated expenses, we may not be able to achieve or sustain profitability, and our stock price could decline.

***Our success and future revenue depend on our ability to achieve design wins and to convince our current and prospective customers to design our products into their product offerings. If we do not continue to win designs or our products are not designed into our customers' product offerings, our results of operations and business will be harmed.***

We sell our silicon timing systems solutions to customers who select our solutions for inclusion in their product offerings. This selection process is typically lengthy and may require us to incur significant design and development expenditures and dedicate scarce engineering resources in pursuit of a single design win with no assurance that our solutions will be selected. If we fail to convince our current or prospective customers to include our products in their product offerings or to achieve a consistent number of design wins, our business, financial condition, and results of operations will be harmed.

Because of our extended sales cycle, our revenue in future years is highly dependent on design wins we are awarded in prior years. It is typical that a design win will not result in meaningful revenue until one year or more or later, if at all. If we do not continue to achieve design wins in the short term, our revenue in the following years will deteriorate.

Further, a significant portion of our revenue in any period may depend on a single product design win with a large customer. As a result, the loss of any key design win or any significant delay in the ramp of volume production of the customer's products into which our product is designed could adversely affect our business, financial condition, and results of operations. We may not be able to maintain sales to our key customers or continue to secure key design wins for a variety of reasons, and our customers can stop incorporating our products into their product offerings with limited notice to us and suffer little or no penalty.

If we fail to anticipate or respond to technological shifts or market demands, or to timely develop new or enhanced products or technologies in response to the same, it could result in decreased revenue and the loss of our design wins to our competitors. Due to the interdependence of various components in the systems within which our products and the products of our competitors operate, customers are unlikely to change to another design, once adopted, until the next generation of a technology. As a result, if we fail to introduce new or enhanced products that meet the needs of our customers or penetrate new markets in a timely fashion, and our designs do not gain acceptance, we will lose market share and our competitive position.

The loss of a key customer or design win, a reduction in sales to any key customer, a significant delay or negative development in our customers' product development plans, or our inability to attract new significant customers or secure new key design wins could seriously impact our revenue and materially and adversely affect our business, financial condition, and results of operations.

***We may experience difficulties demonstrating the value to customers of newer solutions if they believe existing solutions are adequate to meet end customer expectations. If we are unable to sell new generations of our product, our business would be harmed.***

As we develop and introduce new solutions, we face the risk that customers may not value or be willing to bear the cost of incorporating these newer solutions into their product offerings, particularly if they believe their customers are satisfied with prior offerings. Regardless of the improved features or superior performance of the newer solutions, customers may be unwilling to adopt our new solutions due to design or pricing constraints. Because of the extensive time and resources that we invest in developing new solutions, if we are unable to sell new generations of our solutions, our revenue could decline and our business, financial condition, and results of operations would be negatively affected.

***The success of our products is dependent on our customers' ability to develop products that achieve market acceptance, and our customers' failure to do so could negatively affect our business.***

The success of our silicon timing systems solutions is heavily dependent on the timely introduction, quality, and market acceptance of our customers' products incorporating our solutions, which are impacted by factors beyond our control. Our customers' products are often very complex and subject to design complexities that may result in design flaws, as well as potential defects, errors, and bugs. We have in the past been subject to delays and project cancellations as a result of design flaws in the products developed by our customers, changing market requirements, such as the customer adding a new feature, or because a customer's product fails their end customer's evaluation or field trial. In other cases, customer products are delayed due to incompatible deliverables from other vendors. We incur significant design and development costs in connection with designing our products for customers' products that may not ultimately achieve market acceptance. If our customers discover design flaws, defects, errors, or bugs in their products, or if they experience changing market requirements, failed evaluations or field trials, or incompatible deliverables from other vendors, they may delay, change, or cancel a project, and we may have incurred significant additional development costs and may not be able to recoup our costs, which in turn would adversely affect our business, financial condition, and results of operations.

***Our target customer and product markets may not grow or develop as we currently expect, and if we fail to penetrate new markets and scale successfully within those markets, our revenue and financial condition would be harmed.***

Our target markets include the enterprise and telecommunications infrastructure, automotive, industrial, IoT and mobile, and aerospace and defense markets. Substantially all of our revenue for the years ended December 31, 2019 and 2018 was derived from sales in the IoT and mobile, industrial, and consumer markets. In 2017, we began introducing products for the automotive market. In addition, within the timing market, substantially all of our revenue to date has been attributable to sales of MEMS oscillators. We intend to introduce products into the clock IC market, which we began sampling in the second quarter of 2019, and to focus on clock IC and timing sync solutions in the future. Any deterioration in our target customer or product markets or reduction in capital spending to support these markets could lead to a reduction in demand for our products, which would adversely affect our revenue and results of operations. Further, if our target customer markets, including the 5G communications or IoT and mobile markets, do not grow or develop in ways that we currently expect, demand for our technology may not materialize as expected, which would also negatively impact our business, financial condition, and results of operations.

We may be unable to predict the timing or development of trends in our target markets with any accuracy. If we fail to accurately predict market requirements or market demand for these solutions, our business will suffer. A market shift towards an industry standard that we may not support could significantly decrease the demand for our solutions.

Our future revenue growth, if any, will depend in part on our ability to expand within our existing markets, our ability to continue to penetrate emerging markets, such as the 5G communications market, which we entered in 2019, and our ability to enter into new markets, such as the industrial, medical, and military markets. Each of these markets presents distinct and substantial challenges and risks and, in many cases, requires us to develop new customized solutions to address the particular requirements of that market. Meeting the technical requirements and securing design wins in any of these new markets will require a substantial investment of our time and resources. We cannot assure you that we will secure design wins from these or other new markets, or that we will achieve meaningful revenue from sales in these markets. If any of these markets do not develop as we currently anticipate or if we are unable to penetrate them and scale in them successfully, our revenue could decline.

***The average selling prices of our individual products have decreased historically over time and may do so in the future, which could harm our revenue and gross margins.***

Although on average selling prices of our products have increased over time as we introduce higher end products, the average selling prices of our individual products generally decrease over time. Our revenue is derived from sales to large distributors and, in some cases, we have agreed in advance to price reductions, generally over a period of time ranging from two months to three years, once the specified product begins to ship in volume. However, our customers may change their purchase orders and demand forecasts at any time with limited notice due in part to fluctuating end-market demand, which can sometimes lead to price renegotiations. Although these price renegotiations can sometimes result in the average selling prices fluctuating over the shorter term, we expect average selling prices generally to decline over the longer term as our products and our end customers' products mature.

We seek to offset the anticipated reductions in our average selling prices by reducing the cost of our products through improvements in manufacturing yields and lower wafer, assembly, and testing costs, developing new products, enhancing lower-cost products on a timely basis, and increasing unit sales. However, if we are unable to offset these anticipated reductions in our average selling prices, our business, financial condition, and results of operations could be negatively affected.

***If we are not able to successfully introduce and ship in volume new products in a timely manner, our business and revenue will suffer.***

We have developed products that we anticipate will have product life cycles of ten years or more, as well as other products in more volatile high growth or rapidly changing areas, which may have shorter life cycles. Our future success depends, in part, on our ability to develop and introduce new technologies and products that generate new sources of revenue to replace, or build upon, existing revenue streams. If we are unable to repeatedly introduce, in successive years, new products that ship in volume, or if our transition to these new products does not successfully occur prior to any decrease in revenue from our prior products, our revenue will likely decline significantly and rapidly.

***Our gross margins may fluctuate due to a variety of factors, which could negatively impact our results of operations and our financial condition.***

Our gross margins may fluctuate due to a number of factors, including customer and product mix, market acceptance of our new products, timing and seasonality of the end-market demand, yield, wafer pricing, packaging and testing costs, competitive pricing dynamics, and geographic and market pricing strategies.

To attract new customers or retain existing customers, we have in the past and will in the future offer certain customers favorable prices, which would decrease our average selling prices and likely impact gross margins. Further, we may also offer pricing incentives to our customers on earlier generations of products that inherently have a higher cost structure, which would negatively affect our gross margins. In addition, in the event our customers, including our larger end customers, exert more pressure with respect to pricing and other terms with us, it could put downward pressure on our margins.

Because we do not operate our own manufacturing, assembly, or testing facilities, we may not be able to reduce our costs as rapidly as companies that operate their own facilities, and our costs may even increase, which could further reduce our gross margins. We rely primarily on obtaining yield improvements and volume-based cost reductions to drive cost reductions in the manufacture of existing products, introducing new products that incorporate advanced features and optimize die size, and other price and performance factors that enable us to increase revenue while maintaining gross margins. To the extent that such cost reductions or revenue increases do not occur at a sufficient level and in a timely manner, our business, financial condition, and results of operations could be adversely affected.

In addition, we maintain an inventory of our products at various stages of production and in finished good inventory. We hold these inventories in anticipation of customer orders. If those customer orders do not materialize in a timely manner, we may have excess or obsolete inventory which we would have to reserve or write-down, and our gross margins would be adversely affected.

***Our revenue in recent periods may not be indicative of future performance and our revenue may fluctuate over time.***

Our recent revenue should not be considered indicative of our future performance. For the years ended December 31, 2019 and 2018, our revenue was \$84.1 million and \$85.2 million, respectively. As we grow our business, our revenue may fluctuate in future periods due to a number of reasons, which may include slowing demand for our products, increasing competition, a decrease in the growth of our overall market or market saturation, and challenges and our failure to capitalize on growth opportunities.

***If we are unable to manage our growth effectively, we may not be able to execute our business plan and our operating results could suffer.***

In order to succeed in executing our business plan, we will need to manage our growth effectively as we make significant investments in research and development and sales and marketing, and expand our operations and infrastructure both domestically and internationally. If our revenue does not increase to offset these increases in our expenses, we may not achieve or maintain profitability in future periods.

To manage our growth effectively, we must continue to expand our operations, engineering, financial accounting, internal management, and other systems, procedures, and controls. This may require substantial managerial and financial resources, and our efforts may not be successful. Any failure to successfully implement systems enhancements and improvements will likely have a negative impact on our ability to manage our expected growth, as well as our ability to ensure uninterrupted operation of key business systems and compliance with the rules and regulations applicable to public companies. If we are unable to manage our growth effectively, we may not be able to take advantage of market opportunities or develop new silicon timing systems solutions, and we may fail to satisfy customer product or support requirements, maintain the quality of our solutions, execute our business plan or respond to competitive pressures, any of which could negatively affect our business, financial condition, and results of operations.

***Our customers require our products and our third-party contractors to undergo a lengthy and expensive qualification process, which does not assure product sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, our business and operating results would suffer.***

Prior to purchasing our silicon timing systems solutions, our customers require that both our solutions and our third-party contractors undergo extensive qualification processes, which involve testing of our products in the customers' systems, as well as testing for reliability. This qualification process may continue for several months. However, qualification of a product by a customer does not assure any sales of the product to that customer. Even after successful qualification and sales of a product to a customer, a subsequent revision in our third-party contractors' manufacturing process or our selection of a new supplier may require a new qualification process with our customers, which may result in delays and in our holding excess or obsolete inventory. After our products are qualified, it can take several months or more before the customer commences volume production of components or systems that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing, and management efforts, to qualifying our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, sales of those products to the customer may be precluded or delayed, which would cause our business, financial condition, and results of operations to suffer.

***We provide a lifetime warranty on our products and may be subject to warranty or product liability claims, which could result in unexpected expenses and loss of market share.***

We provide a lifetime warranty on our products and generally agree to indemnify our customers for defects in our products. We may be subject to warranty or product liability claims. These claims may require us to make significant expenditures to defend those claims, replace our solutions, refund payments, or pay damage awards. This risk is exacerbated by the lifetime warranty of our products, which exposes us to warranty claims for the entire product lifecycle.

Our silicon timing systems solutions have only been incorporated into end products for the past 12 years. Accordingly, the operation of our products and technology has not been validated over longer periods. If a customer's product fails in use, the customer may incur significant monetary damages, including a product recall or associated replacement expenses as well as lost revenue. The customer may claim that a defect in our product caused the product failure and assert a claim against us to recover monetary damages. In certain situations, circumstances might warrant that we consider incurring the costs or expenses related to a recall of one of our products in order to avoid the potential claims that may be raised should a customer reasonably rely upon our product and suffer a failure due to a design or manufacturing process defect. In addition, the cost of defending these claims and satisfying any arbitration award or judgment with respect to these claims would result in unexpected expenses, which could be substantial, and could harm our business, financial condition, and results of operations. Although we carry product liability insurance, this insurance is subject to significant deductibles and may not adequately cover our costs arising from defects in our products or otherwise.

***Defects in our products could harm our relationships with our customers and damage our reputation.***

Defects in our products may cause our customers to be reluctant to buy our products, which could harm our ability to retain existing customers and attract new customers and adversely impact our reputation. The process of identifying a defective or potentially defective product in systems that have been widely distributed may be lengthy and require significant resources. Further, if we are unable to determine the root cause of a problem or find an appropriate solution, we may delay shipment to customers. As a result, we may incur significant replacement costs and contract damage claims from our customers, and our reputation, business, financial condition, and results of operations may be adversely affected.

***If we fail to accurately anticipate and respond to rapid technological change in the industries in which we operate, our ability to attract and retain customers could be impaired and our competitive position could be harmed.***

We operate in industries characterized by rapidly changing technologies as well as technological obsolescence. The introduction of new products by our competitors, the delay or cancellation of any of our customers' product offerings for which our silicon timing systems solutions are designed, the market acceptance of products based on new or alternative technologies, or the emergence of new industry standards could render our existing or future products uncompetitive, obsolete, and otherwise unmarketable. Our failure to anticipate or timely develop new or enhanced products or technologies in response to changing market demand, whether due to technological shifts or otherwise, could result in the loss of customers and decreased revenue and have an adverse effect on our business, financial condition, and results of operations.

***If our products do not conform to, or are not compatible with, existing or emerging industry standards, demand for our existing solutions may decrease, which in turn would harm our business and operating results.***

We design certain of our products to conform to current industry standards. Some industry standards may not be widely adopted or implemented uniformly, and competing standards may emerge that may be preferred by our distributors or our end customers.

Our ability to compete in the future will depend on our ability to identify and ensure compliance with evolving industry standards in our target markets, as well as in the timing IC industry. The emergence of new industry standards could render our products incompatible with products developed by third-party suppliers or make it difficult for our products to meet the requirements of certain OEMs. If our customers or our third-party suppliers

adopt new or competing industry standards with which our solutions are not compatible, or if industry groups fail to adopt standards with which our solutions are compatible, our products would become less desirable to our current or prospective customers. As a result, our sales would suffer, and we could be required to make significant expenditures to develop new products. Although we believe our products are compliant with applicable industry standards, proprietary enhancements may not in the future result in conformance with existing industry standards under all circumstances. If our products do not conform to, or are not compatible with, existing or emerging standards, it would harm our business, financial condition, and results of operations.

***We may be unable to make the substantial investments that are required to remain competitive in our business.***

The semiconductor industry requires substantial and continuous investment in research and development in order to bring to market new and enhanced solutions. We expect our research and development expenditures to increase in the future as part of our strategy to increase demand for our solutions in our current markets and to expand into additional markets. We are a smaller company with limited resources, and we may not have sufficient resources to maintain the level of investment in research and development required to remain competitive. In addition, we cannot assure you that the technologies, which are the focus of our research and development expenditures, will become commercially successful or generate any revenue.

***If we fail to compete effectively, we may lose or fail to gain market share, which could negatively impact our operating results and our business.***

The global semiconductor market in general, and the timing IC market in particular, is highly competitive. We expect competition to increase and intensify as additional semiconductor companies enter our target markets, and as internal silicon design resources of large OEMs grow. Increased competition could result in price pressure, reduced gross margins and loss of market share, any of which could harm our business, financial condition, and results of operations. Our competitors range from large, international companies offering a wide range of semiconductor products to smaller companies specializing in narrow market verticals. In the MEMS-based oscillator market, we primarily compete against MCHP. In the analog mixed-signal IC and clocking market, we primarily compete against Renesas Electronics Corporation (through their acquisition of Integrated Device Technology, Inc.), Silicon Laboratories Inc., Texas Instruments Incorporated, Microsemi Corporation (which is owned by MCHP), and Analog Devices, Inc. In the oscillator market, we primarily compete against quartz crystal suppliers such as Rakon Limited, Daishinku, Nihon Dempa Kogyo Co., Ltd., TXC Corporation, Seiko Epson Corporation, and Vectron International (which is owned by MCHP). We expect competition in our current markets to increase in the future as existing competitors improve or expand their product offerings and as new competitors enter these markets. In addition, our future growth will depend in part on our ability to successfully enter and compete in new markets, such as the access market. Some of these markets will likely be served by only a few large, multinational OEMs with substantial negotiating and buying power relative to us and, in some instances, with internally developed silicon solutions that can be competitive to our products.

Our ability to compete successfully depends, in part, on factors that are outside of our control, including industry and general economic trends. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support, government support, and other resources, are more established than we are and have significantly better brand recognition and broader product offerings. This in turn may enable them to better withstand adverse economic or market conditions in the future and significantly reduce their pricing so as to compete against us. Our ability to compete successfully will depend on a number of factors, including:

- our ability to define, design, and regularly introduce new products that anticipate the functionality and integration needs of our customers' next-generation products and applications;
- our ability to build strong and long-lasting relationships with our customers and other industry participants;
- our ability to capitalize on, and prevent losses due to, vertical integration by significant customers;
- our solutions' performance and cost-effectiveness relative to those of competing products;
- our ability to achieve design wins;

- the effectiveness and success of our customers' products utilizing our solutions within their competitive end markets;
- our research and development capabilities to provide innovative solutions and maintain our product roadmap;
- the strength of our sales and marketing efforts, including those of our distributors, and our brand awareness and reputation;
- our ability to deliver products in volume on a timely basis at competitive prices;
- our ability to withstand or respond to significant price competition;
- our ability to build and expand international operations in a cost-effective manner;
- our ability to obtain, maintain, protect, and enforce our intellectual property rights, including obtaining intellectual property rights from third parties that may be necessary to meet the evolving demands of the market;
- our ability to defend potential patent infringement claims arising from third parties;
- our ability to promote and support our customers' incorporation of our solutions into their products; and
- our ability to retain high-level talent, including our management team and engineers.

Our competitors may also establish cooperative relationships among themselves or with third parties or may acquire companies that provide similar products to ours. As a result, new competitors or alliances may emerge that could capture significant market share. Any of these factors, alone or in combination with others, could harm our business, financial condition, and results of operations and result in a loss of market share and an increase in pricing pressure.

***We depend on our executive officers and other key employees, and the loss of one or more of these employees or an inability to attract or retain highly skilled employees could adversely affect our business.***

Our success depends largely upon the continued services of our executive officers and other key employees, including our engineering and sales and marketing personnel. From time to time, there may be changes in our executive management team or other key personnel, which could disrupt our business. We do not have employment agreements with our executive officers or other key personnel that require them to continue to work for us for any specified period and, therefore, they could terminate their employment with us at any time. The loss of one or more of our executive officers or other key employees could have an adverse effect on our business.

In addition, to execute our growth plan, we must attract and retain highly qualified personnel. Competition for these personnel in the San Francisco Bay Area, where our headquarters is located, and in other locations where we maintain offices, is intense, especially for engineers with MEMS technology and advanced clock IC design expertise. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. Many of the companies with which we compete for experienced personnel have greater resources than we have. If we hire employees from competitors or other companies, their former employers may attempt to assert that these employees or we have breached legal obligations, resulting in a diversion of our time and resources. In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. If the perceived value of our equity awards declines, it may adversely affect our ability to recruit and retain highly skilled employees. Further, changes in immigration policies may negatively impact our ability to attract and retain personnel, including personnel with specialized technical expertise. If we fail to attract new personnel or fail to retain or motivate our current personnel, our business and future growth prospects could be adversely affected.

***Our company culture has contributed to our success and if we cannot maintain this culture as we grow, our business could be harmed.***

We believe that our company culture, which promotes innovation, open communication, and teamwork, has been critical to our success. We face a number of challenges that may affect our ability to sustain our corporate culture, including:

- failure to identify, attract, reward, and retain people in leadership positions in our organization who share and further our culture, values and mission;
- the increasing size and geographic diversity of our workforce;
- competitive pressures to move in directions that may divert us from our mission, vision, and values;
- the continued challenges of a rapidly-evolving industry; and
- the increasing need to develop expertise in new areas of business that affect us.

If we are not able to maintain our culture, our business, financial condition, and results of operations could be adversely affected.

***We depend on third parties for our wafer fabrication, assembly and testing operations, which exposes us to certain risks that may harm our business.***

We operate an outsourced manufacturing business model. As a result, we rely on third parties for all of our manufacturing operations, including wafer fabrication, assembly, and testing. Although we use multiple third-party supplier sources, we depend on these third parties to supply us with material of a requested quantity in a timely manner that meets our standards for yield, cost, and manufacturing quality. Except for our agreement with Bosch for MEMS wafers, we do not have any long-term supply agreements with any of our other manufacturing suppliers. These third-party manufacturers often serve customers that are larger than us or require a greater portion of their services, which may decrease our relative importance and negotiating leverage with these third parties.

If market demand for wafers or production and assembly materials increases, or if a supplier of our wafers ceases or suspends operations, our supply of wafers and other materials could become limited. We currently have a ten-year supply agreement with Bosch for the fabrication of our MEMS wafers. This agreement expires in 2027 and may be terminated with three years' advance notice beginning in February 2024. We currently rely on Bosch for our MEMS fabrication, and TSMC for our analog circuits fabrication, and any disruption in their supply of wafers or any increases in their wafer or materials prices could adversely affect our gross margins and our ability to meet customer demands in a timely manner, or at all, and lead to reduced revenue. Moreover, wafers constitute a large portion of our product cost. If we are unable to negotiate volume discounts or otherwise purchase wafers at favorable prices and in sufficient quantities in a timely manner, our gross margins would be adversely affected.

To ensure continued wafer supply, we may be required to establish alternative wafer supply sources, which could require significant expenditures and limit our negotiating leverage. We currently rely on Bosch and TSMC as our primary foundries and suppliers for our MEMS timing devices and analog circuits, respectively, and only a few foundry vendors have the capability to manufacture our most advanced solutions, in particular with respect to our MEMS solution. If we engage alternative supply sources, we may encounter difficulties and incur additional costs. For example, we also have a license agreement with Bosch under which Bosch granted us a license to use certain patents. Under this agreement, we are required to pay a royalty fee to Bosch if we engage third parties to manufacture, or if we decide to manufacture ourselves, certain generations of our MEMS wafers through March 31, 2024. In addition, shipments could be significantly delayed while these sources are qualified for volume production. If we are unable to maintain our relationship with Bosch or TSMC, our ability to produce high-quality products could suffer, which in turn could harm our business, financial condition, and results of operations.

We currently rely on ASE, Carsem, and UTAC for assembly and testing, as well as Daishinku and UTAC for ceramic packaging for some of our products. Certain of our manufacturing, packaging, assembly, and testing facilities are located outside of the United States, including Malaysia, Taiwan, and Thailand, where we are subject to increased risk of political and economic instability, difficulties in managing operations, difficulties in enforcing

contracts and our intellectual property, severe weather, and employment and labor difficulties. Although we maintain business disruption insurance, this insurance may not be adequate to cover any losses we may experience as a result of such difficulties. Any of these factors could result in manufacturing and supply problems, and delays in our ability to provide our solutions to our customers on a timely basis, or at all. If we experience manufacturing problems at a particular location, we may be required to transfer manufacturing to a new location or supplier. Converting or transferring manufacturing from a primary location or supplier to a backup facility could be expensive and could take several quarters or more. During such a transition, we would be required to meet customer demand from our then-existing inventory, as well as any partially finished goods that could be modified to the required product specifications. In addition, our end customers may require requalification with a new wafer manufacturer. We typically maintain at least a six-month supply of our MEMS wafers for which Bosch is our primary supplier. We do not otherwise maintain sufficient inventory to address a lengthy transition period. As a result, we may not be able to meet customer needs during such a transition, which could damage our customer relationships.

If one or more of these vendors terminates its relationship with us, or if we encounter any problems with our manufacturing supply chain, our ability to ship our solutions to our customers on time and in the quantity required would be adversely affected, which in turn could cause an unanticipated decline in our sales and loss of customers.

***If the foundries with which we contract do not achieve satisfactory yields or quality, our reputation and customer relationships could be harmed.***

We depend on satisfactory wafer foundry manufacturing capacity, wafer prices, and production yields, as well as timely wafer delivery to meet customer demand and enable us to maintain gross margins. The fabrication of our products is a complex and technically demanding process. Minor deviations in the manufacturing process can cause substantial decreases in yields and, in some cases, cause production to be suspended. Our foundry vendors may experience manufacturing defects and reduced manufacturing yields from time to time. Further, any new foundry vendors we employ may present additional and unexpected manufacturing challenges that could require significant management time and focus. Changes in manufacturing processes or the inadvertent use of defective or contaminated materials by the foundries that we employ could result in lower than anticipated production yields or unacceptable performance of our devices. Many of these problems are difficult to detect at an early stage of the manufacturing process and may be time-consuming and expensive to correct. Poor production yields from the foundries that we employ, or defects, integration issues, or other performance problems in our solutions could significantly harm our customer relationships and financial results, and give rise to financial or other damages to our customers. Any product liability claim brought against us, even if unsuccessful, would likely be time-consuming and costly to defend.

Manufacturing yields for new products initially tend to be lower as we complete product development and commence volume manufacturing, and typically increase as we bring the product to full production. Our business model includes this assumption of improving manufacturing yields and, as a result, material variances between projected and actual manufacturing yields will have a direct effect on our gross margin and profitability. The difficulty of accurately forecasting manufacturing yields and maintaining cost competitiveness through improving manufacturing yields will continue to be magnified by the increasing process complexity of manufacturing semiconductor products.

***Raw material price fluctuations can increase the cost of our products, impact our ability to meet customer commitments, and may adversely affect our results of operations.***

The cost of raw materials is a key element in the cost of our products. Our inability to offset material price inflation through increased prices to customers, suppliers, productivity actions, or through commodity hedges could adversely affect our results of operations. Many major components, product equipment items, and raw materials, are procured or subcontracted on a single or sole-source basis. Although we maintain a qualification and performance surveillance process and we believe that sources of supply for raw materials and components are generally adequate, it is difficult to predict what effects shortages or price increases may have in the future. Our inability to fill our supply needs would jeopardize our ability to fulfill obligations under our contracts, which could, in turn, result in reduced sales and profits, contract penalties or terminations, and damage to our customer relationships.

Furthermore, increases in the price of silicon wafers, testing costs, and commodities, which may result in increased production costs, mainly assembly and packaging costs, may result in a decrease in our gross margins. Moreover, our suppliers may pass the increase in raw materials and commodity costs onto us which would further reduce the gross margin of our products. In addition, as we are a fabless company, global market trends such as a shortage of capacity to fulfill our fabrication needs also may increase our raw material costs and thus decrease our gross margin.

***We rely on our relationships with industry and technology leaders to enhance our product offerings and our inability to continue to develop or maintain such relationships in the future would harm our ability to remain competitive.***

We develop many of our silicon timing systems products for applications in systems that are driven by industry and technology leaders in the communications and computing markets. We work with distributors, resellers, OEMs, and system manufacturers to define industry conventions and standards within our target markets. We believe that these relationships enhance our ability to achieve market acceptance and widespread adoption of our products. If we are unable to continue to develop or maintain these relationships, our silicon timing systems solutions could become less desirable to our customers, our sales could suffer and our competitive position could be harmed.

***We are subject to the cyclical nature of the semiconductor industry.***

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles, and wide fluctuations in product supply and demand. The industry experienced a significant downturn during the most recent global recession and has been experiencing a downturn in 2019. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels, and accelerated erosion of average selling prices. The current downturn in the semiconductor industry has been attributed to a variety of factors, including the ongoing U.S.-China trade dispute, weakness in demand and pricing for semiconductors across applications, and excess inventory. While this downturn has not directly impacted our business to date, any prolonged or significant downturn in the semiconductor industry could adversely affect our business and reduce demand for our products. Any future downturns in the semiconductor industry could also harm our business, financial condition, and results of operations. Furthermore, any significant upturn in the semiconductor industry could result in increased competition for access to third-party foundry and assembly capacity. We are dependent on the availability of this capacity to manufacture and assemble our products and we can provide no assurance that adequate capacity will be available to us in the future.

***Our ability to receive timely payments from, or the deterioration of the financial conditions of, our distributors or our end customers could adversely affect our operating results.***

Our ability to receive timely payments from, or the deterioration of the financial condition of, our distributors or our end customers could adversely impact our collection of accounts receivable, and, as a result, our revenue. We regularly review the collectability and creditworthiness of our customers to determine an appropriate allowance for doubtful accounts. Based on our review of our customers, substantially all of which are large distributors, resellers, OEMs, and system manufacturers, we had a \$0.1 million and a \$0.2 million reserve for doubtful accounts as of December 31, 2019 and December 31, 2018, respectively. If our doubtful accounts, however, were to exceed our current or future allowance for doubtful accounts, our business, financial condition, and results of operations would be adversely affected.

***In preparing our consolidated financial statements, we make good faith estimates and judgments that may change or turn out to be erroneous, which could adversely affect our operating results for the periods in which we revise our estimates or judgments.***

In preparing our consolidated financial statements in conformity with generally accepted accounting principles in the United States (“GAAP”), we must make estimates and judgments in applying our most critical accounting policies. Those estimates and judgments have a significant impact on the results we report in our consolidated financial statements. The most difficult estimates and subjective judgments that we make relate to revenue

recognition, inventories, internally developed software capitalization, and income taxes. We base our estimates on historical experience, input from outside experts 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 and liabilities that are not readily apparent from other sources. We also have other key accounting policies that are not as subjective, and therefore, their application would not require us to make estimates or judgments that are as difficult, but which nevertheless could significantly affect our financial reporting. Actual results may differ materially from these estimates. If these estimates, judgments, or their related assumptions change, our operating results for the periods in which we revise our estimates, judgments, or assumptions could be adversely and perhaps materially affected.

***Changes to financial accounting standards may affect our results of operations and could cause us to change our business practices.***

We prepare our consolidated financial statements in accordance with GAAP. These accounting principles are subject to interpretation by the Financial Accounting Standards Board, the SEC, and various bodies formed to interpret and create accounting rules and regulations. Changes in accounting rules can have a significant effect on our reported financial results and may affect our reporting of transactions completed before a change is announced. Changes to those rules or the questioning of current practices may adversely affect our financial results or the way we conduct our business.

***Our loan agreements contain certain restrictive covenants that may limit our operating flexibility.***

Our loan agreements contain certain restrictive covenants that either limit our ability to, or require a mandatory prepayment in the event that we, incur additional indebtedness, merge with other companies or enter into or consummate certain change of control transactions, acquire other companies, make certain investments, transfer or dispose of assets, amend certain material agreements, or enter into certain other transactions. We may not be able to generate sufficient cash flow or sales to pay the principal and interest under our outstanding debt obligations. Furthermore, our future working capital, borrowings, or equity financing could be unavailable to repay or refinance the amounts outstanding under our current debt obligations. In the event of a liquidation, our existing and any future lenders would be repaid all outstanding principal and interest prior to distribution of assets to unsecured creditors, and the holders of our common stock would receive a portion of any liquidation proceeds only if all of our creditors, including our existing and any future lenders, were first repaid in full.

***We may not be able to accurately predict our future capital needs, and we may not be able to obtain additional financing to fund our operations.***

We may need to raise additional funds in the future. Any required additional financing may not be available on terms acceptable to us, or at all. If we raise additional funds by issuing equity securities or convertible debt, stockholders may experience significant dilution of their ownership interest, and the newly-issued securities may have rights senior to those of the holders of our common stock. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility and would also require us to incur additional interest expense. If additional financing is not available when required or is not available on acceptable terms, we may have to scale back our operations or limit our production activities, and we may not be able to expand our business, develop or enhance our solutions, take advantage of business opportunities, or respond to competitive pressures, which could negatively impact our revenue and the competitiveness of our products.

***We may make acquisitions in the future that could disrupt our business, cause dilution to our stockholders, reduce our financial resources, and harm our business.***

In the future, we may acquire other businesses, products, or technologies. Our ability to make acquisitions and successfully integrate personnel, technologies, or operations of any acquired business is unproven. If we complete acquisitions, we may not achieve the combined revenue, cost synergies, or other benefits from the acquisition that we anticipate, strengthen our competitive position, or achieve our other goals in a timely manner, or at all, and these acquisitions may be viewed negatively by our customers, financial markets, or investors. In addition, any acquisitions we make may create difficulties in integrating personnel, technologies, and operations from the

acquired businesses and in retaining and motivating key personnel. Acquisitions may disrupt our ongoing operations, divert management from their primary responsibilities, subject us to additional liabilities, increase our expenses, and adversely impact our business, financial condition, and results of operations. Acquisitions may also reduce our cash available for operations and other uses, and could result in an increase in amortization expense related to identifiable assets acquired, potentially dilutive issuances of equity securities, or the incurrence of debt, any of which could harm our business, financial condition, and results of operations.

***A portion of our operations is located outside of the United States, which subjects us to additional risks, including increased complexity and costs of managing international operations and geopolitical instability.***

We outsource the fabrication and assembly of all of our products to third parties that are primarily located in Germany and Asia. In addition, we conduct research and development activities in the United States, the Netherlands, Taiwan, and Ukraine and work with third-party contractors in Japan and Russia. We also conduct marketing and administrative functions in the United States, China, Taiwan, and Ukraine. In addition, members of our sales force are located in the United States, China, India, Italy, Taiwan, the United Kingdom, and Ukraine. In addition, approximately 93% of our revenue for the years ended December 31, 2019 and 2018, was from distributors with ship-to locations outside the United States, although we believe the majority of our end customers are based in the U.S., based on sell-through information provided by these distributors. As a result of our international focus, we face numerous challenges and risks, including:

- complexity and costs of managing international operations, including manufacturing, assembly, and testing of our products and associated costs;
- geopolitical and economic instability and military conflicts;
- limited protection for, and vulnerability to theft of, our intellectual property rights, including our trade secrets;
- compliance with local laws and regulations and unanticipated changes in local laws and regulations, including tax laws and regulations, including uncertainty surrounding the United Kingdom's decision to exit the European Union;
- trade and foreign exchange restrictions and higher tariffs, including the recent trade tensions between the U.S. and China that has resulted in higher tariffs on certain semiconductor products;
- timing and availability of import and export licenses and other governmental approvals, permits, and licenses, including export classification requirements;
- foreign currency fluctuations and exchange losses relating to our international operating activities;
- restrictions imposed by the U.S. government or foreign governments on our ability to do business with certain companies or in certain countries as a result of international political conflicts and the complexity of complying with those restrictions;
- transportation delays and other consequences of limited local infrastructure, and disruptions, such as large scale outages or interruptions of service from utilities or telecommunications providers;
- difficulties in staffing international operations;
- changes in immigration policies which may impact our ability to hire personnel;
- local business and cultural factors that differ from our normal standards and practices;
- differing employment practices and labor relations;
- requirements in foreign countries which may impact availability of personnel, such as mandatory military service in countries such as Ukraine;
- heightened risk of terrorist acts;
- regional health issues and the impact of public health epidemics on employees and the global economy, such as the coronavirus outbreak in China and other countries;

- travel restrictions, power outages, and natural disasters; and
- work stoppages.

These risks could harm our international operations, delay new product releases, increase our operating costs, and hinder our ability to grow our operations and business and, consequently, our business, financial condition, and results of operations could suffer. For example, we rely on TSMC in Taiwan for the fabrication of our analog circuits and have sales force personnel in Taiwan. If political tensions between China and Taiwan were to increase, it could disrupt our business. In addition, if the political and military situation in Russia and Ukraine, or the relationship between Russia and the United States, significantly worsens, or if either Russia or the United States imposes significant new economic sanctions or restrictions on doing business, and we are restricted or precluded from continuing our operations in Russia or Ukraine, our costs could increase, and our product development efforts, business, financial condition, and results of operations could be significantly harmed. Further, in December 2019, an outbreak of the coronavirus surfaced in Wuhan, China, and cases have been reported in other countries. This in turn has led to travel restrictions and may otherwise impact companies' international operations. At this point, the extent to which the coronavirus may impact our business is uncertain.

***We face risks related to health epidemics which could adversely affect our business and results of operations.***

Our business could be materially adversely affected by a widespread outbreak of contagious disease, including the recent outbreak of respiratory illness caused by a novel coronavirus first identified in Wuhan, Hubei Province, China. We currently have members of our sales force located in China, Italy, and Taiwan, and conduct marketing and administrative functions in China and Taiwan, which countries have each been impacted by the coronavirus. In addition, TSMC and ASE, our third-party contractors for analog circuit fabrication and packaging, assembly and testing of our products, respectively, and certain of our warehouses for our products, are located in Taiwan. The effects of this outbreak could include disruptions or restrictions on our employees' ability to travel in China and other affected regions, as well as temporary closures of our facilities or the facilities of our suppliers, customers, or other vendors in our supply chain, which could impact our business, interactions and relationships with our customers, third-party suppliers and contractors, and results of operations. Although we do not source a significant amount of products or components from China, our third-party suppliers and customers may source materials from China which could indirectly impact our production or demand for our products. In addition, a significant outbreak of contagious diseases in the human population could result in a widespread health crisis that could adversely affect the economies and financial markets of many countries, resulting in an economic downturn that could reduce the demand for our products and impact our results of operations.

***If significant tariffs or other restrictions are placed on Chinese imports or any related counter-measures are taken by China, our revenue and results of operations may be materially harmed.***

If significant tariffs or other restrictions are placed on Chinese imports or any related counter-measures are taken by China, our revenue and results of operations may be materially and adversely affected. Between July 2018 and September 2019, the U.S. Trade Representative imposed tariffs on products from China, with current tariff rates between 7.5% and 25%. If the existing tariffs are increased, new tariffs are imposed, or there is a court or governmental agency determination that exposes additional products to the tariffs, we may be required to raise our prices on those products, which may further result in a loss of customers and harm our operating performance. The current U.S. administration has indicated that it may further alter trade agreements and terms between China and the United States, including limiting trade with China and imposing additional tariffs on imports from China. The administration has previously imposed new or additional tariffs on Chinese products with short notice and China has imposed certain retaliatory tariffs. If our products become subject to tariffs or other retaliatory trade measures, it could materially and adversely affect our business and operating results. In the event that these or future tariffs are imposed on imports of our products, or that China or other countries take retaliatory trade measures in response to existing or future tariffs, our business may be impacted and we may be required to raise prices or make changes to our operations, any of which could materially harm our revenue or operating results.

***Fluctuations in exchange rates between and among the currencies of the countries in which we do business could adversely affect our results of operations.***

Our sales have been historically denominated in U.S. dollars. An increase in the value of the U.S. dollar relative to the currencies of the countries in which our customers operate could impair the ability of our customers to cost-effectively purchase or integrate our solutions into their product offerings, which may materially affect the demand for our solutions and cause these customers to reduce their orders, which in turn would adversely affect our revenue and business. If we increase operations in other currencies in the future, we may experience foreign exchange gains or losses due to the volatility of other currencies compared to the U.S. dollar. Certain of our employees are located in Malaysia, the Netherlands, Taiwan, Japan, and Ukraine, and we have engineering consultants in Russia. Accordingly, a portion of our payroll as well as certain other operating expenses are paid in currencies other than the U.S. dollar. Our results of operations are denominated in U.S. dollars, and the difference in exchange rates in one period compared to another may directly impact period-to-period comparisons of our results of operations. Furthermore, currency exchange rates have been especially volatile in the recent past, and these currency fluctuations may make it difficult for us to predict our results of operations.

***Failure to comply with the laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.***

We face significant risks if we fail to comply with anti-corruption laws and anti-bribery laws, including, without limitation, the U.S. Foreign Corrupt Practices Act of 1977, as amended (the “FCPA”), the U.S. Travel Act, and the UK Bribery Act 2010, that prohibit improper payments or offers of payment to foreign governments and political parties by us for the purpose of obtaining or retaining business. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses operating in such countries engage in business practices that are prohibited by the FCPA or other applicable laws and regulations. We are in the early stages of implementing our FCPA compliance program and cannot assure you that all of our employees and agents, as well as those companies, to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of these laws could result in severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracting, which could have an adverse effect on our reputation, business, financial condition, and results of operations.

***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. For example, in May 2019, the U.S. Department of Commerce added Huawei Technologies Co., Ltd. and certain of its affiliates to the Entity List, banning all exports to Huawei and its listed affiliates of items subject to control under the Export Administration Regulations (“EAR”). Certain exports to Huawei have been permitted under a temporary general license issued by the U.S. Commerce Department, which currently is valid through April 1, 2020. Although we have not had any direct sales with Huawei, we believe, based on sell-through information provided by our distributors, that we have had a small amount of revenue attributable to Huawei. However, to the extent this occurred during or after May 2019, we understand the products were not subject to the EAR. 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. 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.

***Changes in environmental laws or regulations, including conflict minerals rules, could impair our ability to compete in international markets.***

Our product or manufacturing standards could be impacted by new or revised environmental rules and regulations or other social initiatives. For example, the SEC adopted disclosure requirements in 2012 relating to the sourcing of certain minerals from the Democratic Republic of Congo and certain other adjoining countries. These rules, which required reporting starting in 2014, could adversely affect our costs, the availability of minerals used in our products, and our relationships with customers and suppliers. Also, since our supply chain is complex, we may face reputational challenges with our customers, stockholders, and other stakeholders if we are unable to sufficiently verify the origins for any conflict minerals used in the products that we sell.

***New or future changes to U.S. and non-U.S. tax laws could materially adversely affect us.***

New or future changes in tax laws, regulations, and treaties, or the interpretation thereof, in addition to tax regulations enacted but not in effect, tax policy initiatives and reforms under consideration in the United States or related to the Organisation for Economic Co-operation and Development's ("OECD"), Base Erosion and Profit Shifting ("BEPS"), Project, the European Commission's state aid investigations, and other initiatives could have an adverse effect on the taxation of international businesses. Furthermore, countries where we are subject to taxes, including the United States, are independently evaluating their tax policy and we may see significant changes in legislation and regulations concerning taxation. Certain countries have already enacted legislation, including those related to BEPS Project, which could affect international businesses, and other countries have become more aggressive in their approach to audits and enforcement of their applicable tax laws. On December 22, 2017, the U.S. federal government enacted the Tax Cuts and Jobs Act (the "Tax Act"), which made substantial changes to U.S. tax laws, the consequences of which have not yet been fully determined and may be adverse to our business. In addition, we are unable to predict what future tax reform may be proposed or enacted or what effect such changes would have on our business, but any changes, to the extent they are brought into tax legislation, regulations, policies, or practices, could increase our effective tax rates in the countries where we have operations and have an adverse effect on our overall tax rate, along with increasing the complexity, burden and cost of tax compliance, all of which could impact our business, financial condition, and results of operations.

***Tax regulatory authorities may disagree with our positions and conclusions regarding certain tax positions resulting in unanticipated costs or non-realization of expected benefits.***

A tax authority may disagree with tax positions that we have taken. For example, the Internal Revenue Service ("IRS"), or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property in connection with our intercompany research and development cost sharing arrangement and legal structure. A tax authority may take the position that material income tax liabilities, interest, and penalties are payable by us, in which case, we expect that we might contest such assessment. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could be materially adverse to us and affect our anticipated effective tax rate or operating income, and we could be required to pay substantial penalties and interest where applicable.

***Catastrophic events may disrupt our business.***

Our corporate headquarters and some of our suppliers and foundry vendors are located in areas that are in active earthquake zones or are subject to power outages, natural disasters, political, social, or economic unrest, and other potentially catastrophic events. In the event of a major earthquake, hurricane, flooding, or other catastrophic event such as fire, power loss, telecommunications failure, cyber-attack, war, terrorist attack, political, social, or economic unrest, or disease outbreak, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our product development, breaches of data security, or loss of critical data, any of which could have an adverse effect on our future results of operations. For example, the developing situation with the coronavirus outbreak may negatively impact our business and results of operations.

***State, federal, and foreign laws and regulations related to privacy, data use, and security could adversely affect us.***

We are subject to state and federal laws and regulations related to privacy, data use, and security. In addition, in recent years, there has been a heightened legislative and regulatory focus on data security, including requiring consumer notification in the event of a data breach. Legislation has been introduced in Congress and there have been several Congressional hearings addressing these issues. From time to time, Congress has considered, and may do so again, legislation establishing requirements for data security and response to data breaches that, if implemented, could affect us by increasing our costs of doing business. In addition, several states have enacted privacy or security breach legislation requiring varying levels of consumer notification in the event of a security breach. For example, California passed the California Consumer Privacy Act (“CCPA”), which enhances consumer protection and privacy rights by granting consumers resident in California new rights with respect to the collection of their personal data and imposing new operational requirements on businesses, went into effect in January 2020. The CCPA includes a statutory damages framework and private rights of action against businesses that fail to comply with certain CCPA terms or implement reasonable security procedures and practices to prevent data breaches. Several other states are considering similar legislation.

Foreign governments are raising similar privacy and data security concerns. In particular, the European Union has enacted a General Data Protection Regulation (“GDPR”), which became effective in May 2018. It is unclear how compliance with GDPR will affect our business. China, Russia, Japan, and other countries in Latin America and Asia are also strengthening their privacy laws and the enforcement of privacy and data security requirements. Complying with such laws and regulations may be time-consuming and require additional resources, and could therefore adversely affect our business, financial condition, and results of operations.

***Breaches or other disruptions of our security systems may damage our reputation and adversely affect our business.***

Our security systems are designed to protect our customers’, suppliers’, and employees’ confidential information, as well as maintain the physical security of our facilities. We also rely on a number of third-party cloud-based service providers of corporate infrastructure services relating to, among other things, human resources, electronic communication services, and some finance functions, and we are, of necessity, dependent on the security systems of these providers. These technologies are subject to failure, including as a result of an inability to have such technologies properly supported, updated, expanded, or integrated into other technologies. These technologies may also contain open source and third-party software which may unbeknownst to us contain defects or viruses.

Any security breaches or other unauthorized access by third parties to the systems of our cloud-based service providers or the existence of computer viruses in their data or software could expose us to a risk of information loss and misappropriation of confidential information. Accidental or willful security breaches or other unauthorized access by third parties to our information systems or facilities, or the existence of computer viruses in our data or software could expose us to a risk of information loss, misappropriation of proprietary and confidential information, as well as work stoppages or disruptions. Any theft or misuse of this information could result in, among other things, unfavorable publicity, damage to our reputation, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, regulatory fines or penalties, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of this information, any of which could have an adverse effect on our business, financial condition, results of operations, reputation, and

relationships with our customers and suppliers. Cybersecurity threats, which include computer viruses, spyware and malware, attempts to access information, denial of service attacks, and other electronic security breaches, are persistent and evolve quickly. Such threats have increased in frequency, scope, and potential impact in recent years. Since the techniques used to obtain unauthorized access or to sabotage systems change frequently and are often not recognized until after they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

### **Risks Related to Intellectual Property**

***Our failure to adequately protect our intellectual property rights could impair our ability to compete effectively or defend ourselves from litigation, which could harm our business, financial condition, and results of operations.***

Our success depends, in part, on our ability to protect our intellectual property. We rely primarily on patent, copyright, trademark, and trade secret laws, as well as confidentiality and non-disclosure agreements, and other contractual protections, to protect our technologies and proprietary know-how, all of which offer only limited protection. The steps we have taken to protect our intellectual property rights may not be adequate to prevent the misappropriation, infringement, or other violation of our proprietary information or infringement of our intellectual property rights, and our ability to prevent such misappropriation, infringement, or other violation is uncertain, particularly in countries outside of the United States. As of December 31, 2019, we had 59 issued U.S. patents, expiring generally between 2026 and 2036, and 32 pending U.S. patent applications (including three provisional applications). Our issued patents and pending patent applications generally relate to our MEMS fabrication process, MEMS resonators, circuits, packaging, and oscillator systems. We cannot assure you that any patents from any pending patent applications (or from any future patent applications) will be issued, and even if the pending patent applications are granted, the scope of the rights granted to us may not be meaningful or provide us with any commercial advantage. For example, these patents could be opposed, contested, circumvented, designed around by our competitors, be narrowed or declared invalid or unenforceable in judicial or administrative proceedings including re-examination, inter partes review, post-grant review, interference and derivation proceedings and equivalent proceedings in foreign jurisdictions, or be subject to ownership claims by third parties. The failure of our patents to adequately protect our technology might make it easier for our competitors to offer similar products or technologies. Our foreign patent protection is less comprehensive than our U.S. patent protection and may not protect our intellectual property rights in some countries where our products are sold or may be sold in the future. Many U.S.-based companies have encountered substantial third-party intellectual property infringement in foreign countries, including countries where we sell products. Even if foreign patents are granted, effective enforcement in foreign countries may not be available. If such an impermissible use of our intellectual property or trade secrets were to occur, our ability to sell our solutions at competitive prices may be adversely affected and our business, financial condition, and results of operations could be adversely affected.

The legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights are uncertain and evolving. We cannot assure you that others will not develop or patent similar or superior technologies or solutions, or that our patents, trademarks, and other intellectual property will not be challenged, invalidated, or circumvented by others.

We also have a license to certain patents from Bosch relating to the design and manufacture of MEMS-based timing applications. The patent rights obtained under the license agreement expire between 2021 and 2029, and the license agreement expires upon expiration of the last patent licensed under the agreement. If we were to lose the benefit of these patents or other licensed technology used in our business, it could harm our business and our ability to compete.

We believe that the success of our business depends more on proprietary technology, information and processes, and know-how than on our patents or trademarks. Much of our proprietary information and technology related to manufacturing processes is not patented and may not be patentable.

Unauthorized copying or other misappropriation of our proprietary technologies could enable third parties to benefit from our technologies without paying us for doing so, which could harm our business. Monitoring unauthorized use of our intellectual property is difficult and costly. It is possible that unauthorized use of our intellectual property may have occurred or may occur without our knowledge. We cannot assure you that the steps we have taken will prevent unauthorized use of our intellectual property, or that others will not develop technologies similar or superior to our technology or design around our intellectual property. Our failure to effectively protect our intellectual property could reduce the value of our technology in licensing arrangements or in cross-licensing negotiations.

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

We may in the future need to initiate infringement claims or litigation in order to try to protect or enforce our intellectual property rights. Litigation, whether we are a plaintiff or a defendant, can be expensive and time-consuming and may divert the efforts of our management and other personnel, which could harm our business, whether or not such litigation results in a determination favorable to us. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. If we are unable to meaningfully protect our proprietary rights or if third parties independently develop or gain access to our or similar technologies, our business, financial condition, results of operations, reputation, and competitive position could be harmed.

***We may face intellectual property infringement, misappropriation, or other claims, which could be time-consuming and costly to defend or settle and which could result in the loss of significant rights and harm our relationships with our customers and distributors.***

The semiconductor industry in which we operate is characterized by companies that hold patents and other intellectual property rights and vigorously pursue, protect, and enforce intellectual property rights. From time to time, third parties may assert against us and our customers and distributors their patent and other intellectual property rights to technologies that are important to our business. For example, in March 2019, VTT Technical Research Centre of Finland, Ltd. filed suit in the United States District Court for the Northern District of California alleging infringement by us of a patent. We have not accrued for a loss contingency relating to this matter. For more information regarding this matter, see “Item 3—Legal Proceedings.”

In addition, our commercial success depends upon our ability to manufacture and sell our products without infringing, misappropriating, or otherwise violating the intellectual property rights of others. Claims that our products, processes, or technology infringe, misappropriate, or otherwise violate third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and other personnel. We may in the future, particularly as a public company with an increased profile and visibility, receive communications from others alleging our infringement, misappropriation, or other violation of patents, trade secrets, or other intellectual property rights. We cannot assure you that, if made, these claims will not be successful, and lawsuits resulting from such allegations, even if we believe they are invalid, could subject us to significant liability for damages, invalidate our proprietary rights, and prevent us from selling specific products. Moreover, there could be public announcements of the results of hearings, motions, or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Intellectual property claims could also harm our relationships with our customers or distributors and might deter future customers from doing business with us. We do not know whether we will prevail in any such proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If any future proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the applicable products, processes, or technology;
- pay substantial damages for infringement by us or our customers;
- expend significant resources to develop non-infringing products, processes, or technology, which may not be successful;
- license technology from the third party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor;
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property rights against others; or
- pay substantial damages to our customers or end users to discontinue their use of or to replace infringing technology sold to them with non-infringing technology, if available.

Any of the foregoing results could adversely affect our business, financial condition, and results of operations.

***Any potential dispute involving patents or other intellectual property could affect our customers, which could trigger our indemnification obligations to them and result in substantial expense to us.***

In any potential dispute involving patents or other intellectual property, our customers could also become the target of litigation. Our agreements with customers and other third parties generally include indemnification or other provisions under which we agree to indemnify or otherwise be liable to them for losses suffered or incurred as a result of claims of intellectual property infringement, damages caused by us to property or persons, or other liabilities relating to or arising from our solutions included in their products. Large indemnity payments or damage claims from contractual breach could harm our business, financial condition, and results of operations. From time to time, customers require us to indemnify or otherwise be liable to them for breach of confidentiality or failure to implement adequate security measures with respect to their intellectual property and trade secrets. Although we normally contractually limit our liability with respect to such obligations, we may still incur substantial liability related to them. Any litigation against our customers could trigger technical support and indemnification obligations under some of our agreements, which could result in substantial expense to us.

In addition, other customers or end customers with whom we do not have formal agreements requiring us to indemnify them may ask us to indemnify them if a claim is made as a condition to awarding future design wins to us. Because some of our customers are larger than we are and have greater resources than we do, they may be more likely to be the target of an infringement claim by third parties than we would be, which could increase our chances of becoming involved in a future lawsuit. If any such claims were to succeed, we might be forced to pay damages on behalf of our customers that could increase our expenses, disrupt our ability to sell our solutions and reduce our revenue. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other current and prospective customers and reduce demand for our solutions. In addition to the time and expense required for us to supply support or indemnification to our customers, any such litigation could severely disrupt or shut down the business of our customers, which in turn could hurt our relations with our customers and cause the sale of our products to decrease. Any of the foregoing could harm our business, financial condition, and results of operations.

## Risks Related to Our Relationship with MegaChips Corporation

***As long as MegaChips controls us, your ability to influence matters requiring stockholder approval will be limited.***

MegaChips owns 10,000,000 shares of our common stock, representing approximately 66.8% of our outstanding common stock as of December 31, 2019. For so long as MegaChips continues to hold at least 50% of our outstanding common stock, MegaChips is expected to continue to hold at least one out of seven seats on our board of directors. For so long as MegaChips, its successors in interest, and its subsidiaries hold at least a majority of our outstanding common stock, MegaChips will be able to elect the members of our board of directors and could at any time replace our entire board of directors.

In addition, until such time as MegaChips, its successors in interest, and its subsidiaries collectively own less than a majority of the shares of all of our common stock then outstanding, MegaChips will have the ability to take stockholder action without the vote of any other stockholder, and other stockholders will not be able to affect the outcome of any stockholder vote during this period. As a result, MegaChips will have the ability to control all matters affecting us, including:

- through our board of directors, any determination with respect to our business plans and policies, including the appointment and removal of our officers;
- any determinations with respect to mergers and other business combinations;
- our acquisition or disposition of assets;
- our financing activities;
- the allocation of business opportunities that may be suitable for us and MegaChips;
- the payment of dividends on our common stock; and
- the number of shares available for issuance under our stock plans.

MegaChips' voting control may discourage transactions involving a change of control of us, including transactions in which you as a holder of our common stock might otherwise receive a premium for your shares over the then current market price.

MegaChips is not prohibited from selling a controlling interest in us to a third party and may do so without your approval and without providing for a purchase of your shares of common stock. Accordingly, your shares of common stock may be worth less than they would be if MegaChips did not maintain voting control over us.

***We may be impacted by risks associated with MegaChips and third parties may seek to hold us responsible for liabilities of MegaChips.***

We may be negatively impacted by events affecting MegaChips. For example, if MegaChips were subject to shareholder or other litigation or takeover activity, it could disrupt our business and operations. In addition, third parties may seek to hold us responsible for MegaChips' liabilities, particularly as a public company in the U.S. with an increased profile and visibility. However, if those liabilities are significant and we are ultimately held liable for them, we cannot assure you that we will be able to recover the full amount of our losses from MegaChips. This in turn may adversely affect our business, financial condition, and results of operations. Further, we may also be subject to risks associated with changes in Japanese laws and regulations, which may impact us as a subsidiary of a Japanese company.

***Our inability to resolve any disputes that arise between us and MegaChips with respect to our past and ongoing relationships may adversely affect our operating results.***

Disputes may arise between MegaChips and us in a number of areas relating to our past and ongoing relationships, including:

- labor, tax, employee benefit, indemnification, and other matters arising from our separation from MegaChips;
- employee retention and recruiting;
- business combinations involving us;
- sales or distributions by MegaChips of all or any portion of its ownership interest in us;
- the nature, quality, and pricing of services MegaChips has agreed to provide us; and
- business opportunities that may be attractive to both MegaChips and us.

We may not be able to resolve any potential conflicts, and even if we do, the resolution may be less favorable than if we were dealing with an unaffiliated party.

We currently have a loan agreement with MegaChips. As of December 31, 2019, there is no outstanding balance under this loan (the “MegaChips Loan”). The MegaChips Loan bears interest at a rate equal to the interest rate at which MegaChips procured the funds from Sumitomo Mitsui Banking Corporation (“SMBC”), plus 0.09%. MegaChips has discretion whether to accept our request for a loan. We have also entered into a distribution agreement with MegaChips under which MegaChips has the exclusive right to promote, market, and sell our products in Japan as the exclusive distributor. The agreements we entered into with MegaChips may be amended upon agreement between the parties. Because we are controlled by MegaChips, we may not have the leverage to negotiate amendments to these agreements on terms as favorable to us compared to those we would negotiate with an unaffiliated third party.

In addition, MegaChips guarantees our obligations under our revolving line of credit with The Bank of Tokyo-Mitsubishi UFJ, Ltd. (“MUFG”), which has an aggregate principal amount of up to \$50.0 million, and our revolving line of credit with SMBC which has an aggregate principal amount of up to \$20.0 million. We may not have the leverage to negotiate terms favorable to us under these agreements, as we are no longer a wholly owned subsidiary of MegaChips.

***There could be potential conflicts of interest between us and affiliates of MegaChips, which could impact our business and operating results.***

Some of our directors and executive officers own MegaChips’ common stock and restricted stock units. In addition, some of our directors are executive officers and/or directors of MegaChips. Ownership of MegaChips securities by our directors and officers and the presence of executive officers or directors of MegaChips on our board of directors could create, or appear to create, conflicts of interest with respect to matters involving both us and MegaChips. For example, corporate opportunities may arise that concern both of our businesses, such as the potential acquisition of a particular business or technology that is complementary to both of our businesses. In addition, we have not established at this time any procedural mechanisms to address actual or perceived conflicts of interest of such directors and officers and expect that our board of directors, in the exercise of its fiduciary duties, will determine how to address any actual or perceived conflicts of interest on a case-by-case basis. If any corporate opportunity arises and if our directors and officers do not pursue it on our behalf pursuant to the provisions in our amended and restated certificate of incorporation, we may not become aware of, and may potentially lose, a significant business opportunity.

In addition, MegaChips is listed on the Tokyo Stock Exchange and is therefore subject to disclosure and reporting obligations in Japan that may vary from the disclosure and reporting obligations to which we are subject, as well as the timing of such disclosure and reporting obligations. For example, MegaChips may be required to include financial information regarding us in its consolidated financial statements prior to the time we may otherwise be required to file a periodic report relating to our financial information for a given fiscal period. This in turn may cause confusion for our common stockholders.

MegaChips may at any time replace our entire board of directors. As a result, unless and until MegaChips, its successors in interest, and its subsidiaries collectively own less than a majority of our common stock then outstanding, MegaChips could effectively control and direct our board of directors, which in turn may create issues if and to the extent our interests and those of MegaChips diverge. Under these circumstances, persons who might otherwise accept our invitation to join our board of directors may decline.

***We are a “controlled company” within the meaning of the Nasdaq listing rules and as such are exempt from certain corporate governance requirements.***

As a result of MegaChips’ holding more than 50% of the voting power for our board of directors described above, we are a “controlled company” within the meaning of the listing rules of The Nasdaq Stock Market LLC (the “Nasdaq listing rules”). Therefore, we are not required to comply with certain corporate governance rules that would otherwise apply to us as a listed company on The Nasdaq Stock Market LLC (“Nasdaq”), including the requirement that compensation committee and nominating and corporate governance committee be composed entirely of “independent” directors (as defined by the Nasdaq listing rules). As a “controlled company” our board of directors is not required to include a majority of “independent” directors. Should the interests of MegaChips differ from those of other stockholders, it is possible that the other stockholders might not be afforded such protections as might exist if our board of directors, or such committees, were required to have a majority, or be composed exclusively, of directors who were independent of MegaChips or our management.

## **Risks Related to Our Common Stock**

***Our stock price may be volatile and may decline, resulting in a loss of some or all of your investment.***

The trading price and volume of our common stock is likely to be volatile and could fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our results of operations due to, among other things, changes in customer demand, product life cycles, pricing, ordering patterns, and unforeseen operating costs;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of us, changes in financial estimates or ratings by any securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
- announcements by our significant customers of changes to their product offerings, business plans, or strategies;
- announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments;
- changes in operating performance and stock market valuations of other technology companies generally, or those in the semiconductor industry;
- timing and seasonality of the end-market demand;
- cyclical fluctuations in the semiconductor market;
- price and volume fluctuations in the overall stock market from time to time, including as a result of trends in the economy as a whole;

- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- new laws or regulations or new interpretations of existing laws, or regulations applicable to our business;
- any major change in our management;
- lawsuits threatened or filed against us; and
- other events or factors, including those resulting from war, incidents of terrorism, or responses to these events.

In addition, the market for technology stocks and the stock markets in general have experienced extreme price and volume fluctuations. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business, financial condition, and results of operations.

***Substantial future sales of our common stock could cause the market price of our common stock to decline.***

The market price of our common stock could decline as a result of substantial sales of our common stock, particularly sales by our directors, executive officers, and significant stockholders, including MegaChips, a large number of shares of our common stock becoming available for sale or the perception in the market that holders of a large number of shares intend to sell their shares. As of February 28, 2020, 15,060,542 shares of common stock were outstanding. Except as described below, all of the shares of common stock are freely transferable without restriction or additional registration under the Securities Act of 1933, as amended, or the Securities Act. Subject to the restrictions under Rule 144 under the Securities Act, approximately 10.2 million shares of our common stock will be eligible for sale beginning May 19, 2020 upon the expiration of market stand-off provisions or lock-up agreements entered into in connection with our initial public offering. The market price of our common stock could decline if the holders of those shares sell them or are perceived by the market as intending to sell them.

Certain members of our management, including certain of our executive officers, purchased in the aggregate 86,923 shares of our common stock in our initial public offering. Any such shares purchased by individuals who are considered to be our affiliates cannot be freely resold in the public market as a result of restrictions under securities laws, but will be able to be sold following the expiration of the restrictions contained in the lock-up agreements described above that our executive officers and directors have entered into and subject to Rule 144

As of February 28, 2020, MegaChips holds 10,000,000 shares of our common stock. We have also registered shares of common stock that we may issue under our employee equity incentive plans. These shares may be sold freely in the public market upon issuance, subject to existing market stand-off or lock-up agreements and relevant vesting schedules.

***If securities analysts or industry analysts downgrade our common stock, publish negative research or reports, or fail to publish reports about our business, our stock price and trading volume could decline.***

The market price and trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us, our business and our market. If one or more analysts adversely change their recommendation regarding our stock or change their recommendation about our competitors' stock, our stock price would likely decline. If one or more analysts cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets which in turn could cause our stock price or trading volume to decline. In addition, if our operating results fail to meet the expectations created by securities analysts' reports, our stock price could decline.

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

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation, and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Although our existing loan agreements do not contain restrictions on our ability to pay dividends or make distributions, we may in the future amend our existing loan agreements or enter into agreements that contain such restrictions. Any return to stockholders will therefore be limited to the increase, if any, in our stock price, which may never occur.

***We might not be able to utilize a significant portion of our net operating loss carryforwards and research and development tax credit carryforwards.***

As of December 31, 2019, we had U.S. federal and state net operating loss (“NOL”), carryforwards of approximately \$156.5 million and \$63.7 million, respectively, and U.S. federal and state research and development tax credit carryforwards of approximately \$3.9 million and \$3.6 million, respectively. The U.S. federal NOL carryforwards begin to expire in 2025 and the state NOL carryforwards begin to expire in 2028. The U.S. federal research and development tax credit carryforwards begin to expire in 2025 and the state research and development tax credit carryforwards carry forward indefinitely. These net operating loss and U.S. federal tax credit carryforwards could expire unused and/or be unavailable to offset future income tax liabilities. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), and corresponding provisions of California state law, if a corporation undergoes an “ownership change,” which is 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 and other pre-change tax attributes to offset its post-change income may be limited. We completed a Section 382 analysis and determined an ownership change occurred in 2014 and concluded that it had no impact on U.S. federal and California net operating losses or on U.S. federal research and development credits. Our recent initial public offering did not result in a change in ownership of greater than 50%. We may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, some of which may be outside of our control. If we determine that an ownership change has occurred and our ability to use our historical net operating loss and tax credit carryforwards is materially limited, it would harm our future business, financial condition, and results of operations by effectively increasing our future tax obligations. In addition, under the Tax Act, federal NOLs incurred in 2018 and in future years may be carried forward indefinitely but generally may not be carried back and the deductibility of such NOLs is limited to 80% of taxable income.

***Our actual operating results may not meet our guidance and expectations, which would likely cause our stock price to decline.***

From time to time, we may release guidance in our earnings releases, earnings conference calls, or otherwise, regarding our future performance that represent our management’s estimates as of the date of release. If given, this guidance, which will include forward-looking statements, will be based on projections prepared by our management. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control. The principal reason that we expect to release guidance is to provide a basis for our management to discuss our business outlook with analysts and stockholders. With or without our guidance, analysts, and other third parties may publish expectations regarding our business, financial condition, and results of operations. We do not accept any responsibility for any projections or reports published by any such third parties. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions of the guidance furnished by us will not materialize or will vary significantly from actual results. If our actual performance does not meet or exceed our guidance or expectations, the trading price of our common stock is likely to decline.

***We incur increased costs and demands on management as a result of compliance with laws and regulations applicable to public companies, which could harm our operating results.***

As a public company we incur significant legal, accounting, and other expenses, including costs associated with public company reporting requirements. Our management team and other personnel will need to devote a substantial amount of time to, and we may not effectively or efficiently manage our transition into a public company.

We intend to hire additional accounting and finance personnel with system implementation experience and expertise regarding compliance with the Sarbanes-Oxley Act. We may be unable to locate and hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If we are unable to recruit and retain additional finance personnel or if our finance and accounting team is unable for any reason to respond adequately to the increased demands that will result from being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause our stock price to decline and could harm our business, financial condition, and results of operations.

If we fail to strengthen our financial reporting systems, infrastructure, and internal control over financial reporting to meet the demands that will be placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately or prevent fraud. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404 of the Sarbanes-Oxley Act (“Section 404”).

***As a public company, we are subject to additional regulatory compliance requirements, including Section 404, and if we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud.***

Rules and regulations such as the Sarbanes-Oxley Act have increased our legal and finance compliance costs and made some activities more time-consuming and costly. For example, Section 404 requires that our management report on, and our independent auditors attest to, the effectiveness of our internal control structure and procedures for financial reporting. However, our auditors will not be required to formally attest to the effectiveness of our internal control over financial reporting pursuant to Section 404 until we are no longer an “emerging growth company,” as defined in the JOBS Act. Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. Section 404 compliance may divert internal resources and will take a significant amount of time and effort to complete. We may not be able to successfully complete the procedures and certification and attestation requirements of Section 404 by the time we will be required to do so. Implementing these changes may take a significant amount of time and may require specific compliance training of our personnel. In the future, we may discover areas of our internal controls that need improvement. If our auditors or we discover a material weakness or significant deficiency, the disclosure of that fact, even if quickly remedied, could reduce the market’s confidence in our consolidated financial statements and harm our stock price. Any inability to provide reliable financial reports or prevent fraud would harm our business. We may not be able to effectively and timely implement necessary control changes and employee training to ensure continued compliance with the Sarbanes-Oxley Act and other regulatory and reporting requirements. If we fail to successfully complete the procedures and certification and attestation requirements of Section 404, or if in the future our Chief Executive Officer, Chief Financial Officer or independent registered public accounting firm determines that our internal controls over financial reporting are not effective as defined under Section 404, we could be subject to investigations or sanctions by Nasdaq, the SEC or other regulatory authorities. Furthermore, perceptions of the company may suffer, and this could cause a decline in the market price of our shares of common stock. We cannot assure you that we will be able to fully comply with the requirements of the Sarbanes-Oxley Act or that management or, when applicable, our auditors will conclude that our internal controls are effective in future periods. Irrespective of compliance with Section 404, any failure of our internal controls could have a material adverse effect on our stated results of operations and harm our reputation.

***We are an emerging growth company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.***

We are an “emerging growth company,” as defined in the JOBS Act. We intend to take advantage of certain exemptions under the JOBS Act from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. We may take advantage of these exemptions for up to five years or until we are no longer an “emerging growth company,” whichever is earlier.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we are choosing to “opt out” of such extended transition period, and, as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

We cannot predict if investors will find our common stock less attractive if we choose to rely on any of the exemptions afforded to emerging growth companies. If some investors find our common stock less attractive because we rely on any of these exemptions, there may be a less active trading market for our common stock and the market price of our common stock may be more volatile.

***Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management, and limit the market price of our common stock.***

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. Our amended and restated certificate of incorporation and bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock;
- require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
- specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of our board of directors, or our Chief Executive Officer;
- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
- establish that our board of directors is divided into three classes, with each class serving three-year staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled by a majority of directors then in office, even if less than a quorum; and
- require the approval of our board of directors or the holders of at least 66 2/3% of our outstanding shares of capital stock to amend our bylaws and certain provisions of our certificate of incorporation.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause our stock price to decline.

*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, which could limit our stockholders' ability to obtain what they believe to be a favorable judicial forum for disputes with us or our directors, officers, or other employees.*

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (c) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (d) any action asserting a claim against us governed by the internal affairs doctrine. Nothing in our amended and restated bylaws precludes stockholders that assert claims under the Securities Act or the Exchange Act, from bringing such claims in state or federal court, subject to applicable law.

Any person or entity purchasing or otherwise acquiring any interest in our capital stock shall be deemed to have notice of and consented to the provisions of our bylaws described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, or other employees. Alternatively, if a court were to find 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 adversely affect our business, financial condition, and results of operations and result in a diversion of the time and resources of our management and board of directors.

**Item 1B. Unresolved Staff Comments.**

None

**Item 2. Properties.**

Our principal executive offices are located in a leased facility in Santa Clara, California, consisting of approximately 50,400 square feet of office space under lease that expires in December 2026. This facility accommodates our principal engineering, sales, marketing, operations, finance, and administrative activities. We also lease offices in Michigan, Japan, Malaysia, the Netherlands, and Ukraine. We do not own any real property. We believe that our leased facilities are adequate to meet our current needs and that additional facilities will be available on commercially reasonable terms for lease to meet future needs.

**Item 3. Legal Proceedings.**

In March 2019, VTT Technical Research Centre of Finland, Ltd. filed suit in the United States District Court for the Northern District of California alleging infringement by us of a patent relating to a specific combination of features set forth in the asserted patent. The complaint seeks unspecified monetary damages and injunctive relief. On January 22, 2020, we participated in a mediation that had been ordered by the Court. The case was not resolved at the mediation, and the proceedings will continue according to the current case management schedule.

From time to time, we may become involved in additional legal proceedings arising in the ordinary course of our business. We are not currently a party to any legal proceedings the outcome of which, if determined adversely to us, would individually or in the aggregate have a material adverse effect on our business, financial condition, and results of operations.

**Item 4. Mine Safety Disclosures.**

Not applicable

## PART II

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

#### Market Information for Common Stock

Our common stock has been quoted on the Nasdaq Global Market under the symbol “SITM” since our initial public offering in November 2019. Prior to that time, there was no public market for our common stock.

As of February 28, 2020, there were 75 holders of record (not including beneficial holders of stock held in street names) of our common stock.

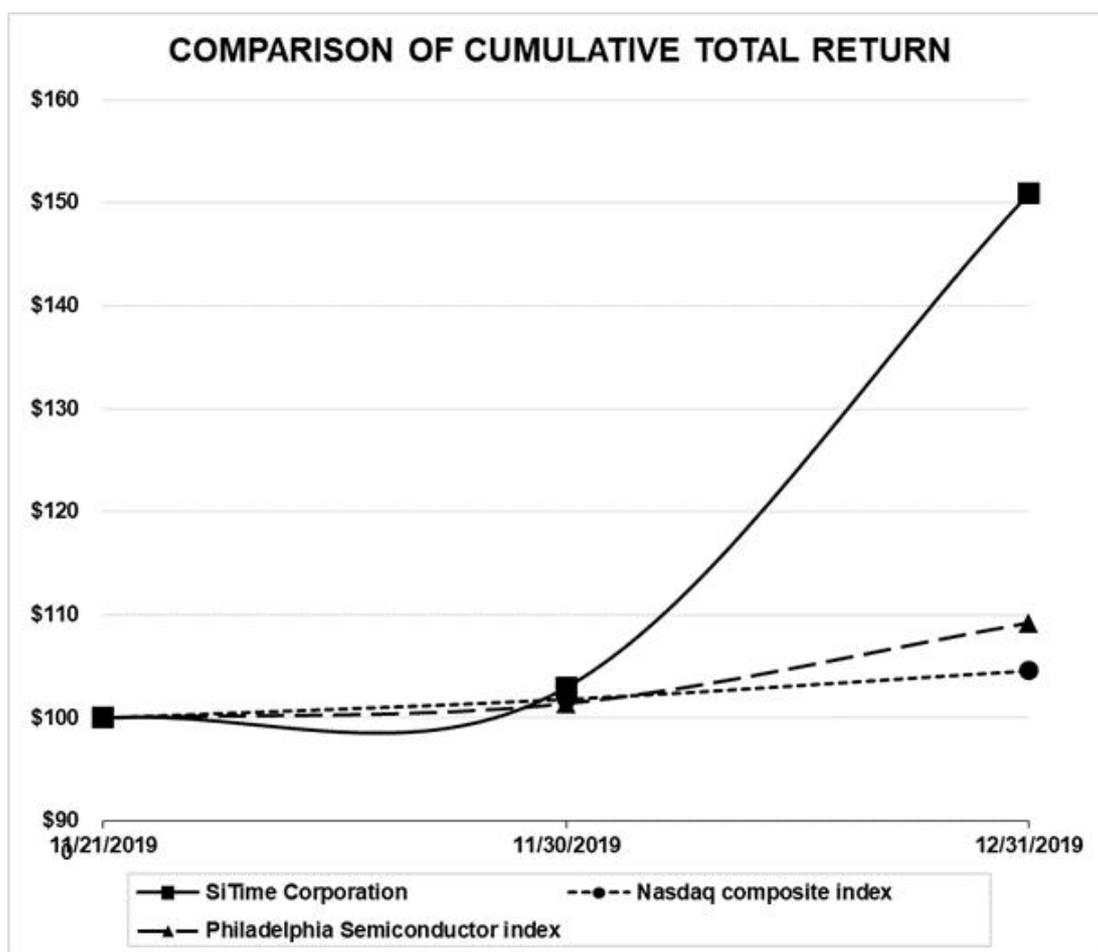
#### Dividend Policy

We have never paid any cash dividends on our common stock. Our board of directors currently intends to retain any future earnings to support operations, repayment of debt and to finance the growth and development of our business and does not intend to pay cash dividends on our common stock for the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board.

#### Stock Performance Graph

The following information shall not be deemed to be soliciting material or to be filed with the SEC, or subject to Regulations 14A or 14C under the Exchange Act or to the liabilities of Section 18 of the Exchange Act nor shall such information be incorporated by reference into any future filing under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

The following line graph compares for the period beginning November 21, 2019, the initial trading date of our common stock on the Nasdaq Global Market, and ending on December 31, 2019, the last day of our fiscal year, the cumulative total stockholder return for our common stock, the Nasdaq Composite Index and Philadelphia Semiconductor Index and assumes reinvestment of any dividends. The stockholder return shown in the graph below is not necessarily indicative of, nor is it intended to forecast, the potential future performance of our common stock, and we do not make or endorse any predictions as to future stockholder returns.



<u>Company Name/Index</u>	<u>Base Period</u> 11/21/2019	<u>November 30,</u> 2019	<u>December 31,</u> 2019
SiTime Corporation	100	102.96	150.89
Nasdaq composite index	100	101.81	104.58
Philadelphia Semiconductor index	100	101.40	109.24

**Item 6. Selected Financial Data.**

	Year Ended		
	December 31, 2019 (1)(2)	December 31, 2018	December 31, 2017
<b>Consolidated Statements of Operations</b>			
<b>Data:</b>			
Revenue	\$ 84,074	\$ 85,214	\$ 101,065
Gross profit	39,558	36,205	47,918
Total operating expenses	44,431	43,995	42,328
Income (loss) from operations	(4,873)	(7,790)	5,590
Net income (loss)	(6,607)	(9,342)	4,723
Net income (loss) per share attributable to common stockholder, basic and diluted	(0.63)	(0.93)	0.47
Weighted-average shares used to compute basic and diluted net income (loss) per share	10,558	10,000	10,000
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 63,418	\$ 7,889	\$ 9,097
Working capital (deficit)	46,351	(5,576)	(693)
Total assets	123,391	72,689	74,728
Total debt	41,000	46,000	43,000
Total liabilities	61,251	61,674	57,052
Total stockholders' equity	62,140	11,015	17,676

(1) We completed our initial public offering in November 2019.

(2) In 2019, we adopted Accounting Standards Update 2016-02, *Leases* using the optional adoption method. Refer to Note 2 of our consolidated financial statements under Item 8 for more information.

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

The Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) should be read in conjunction with the financial statements and the notes thereto included elsewhere in this Annual Report on Form 10-K. The MD&A contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act that involve risks and uncertainties, which are discussed under Item 1A.

### **Overview**

We are a leading provider of silicon timing solutions. Our timing solutions are the heartbeat of our customers’ electronic systems, solving complex timing problems and enabling industry-leading products. We provide solutions that are differentiated by high performance and reliability, programmability, small size, and low power consumption. Our products have been designed into over 200 applications across our target markets, including enterprise and telecommunications infrastructure, automotive, industrial, IoT and mobile, and aerospace and defense.

We commenced commercial shipments of our first oscillator products in 2006. Substantially all of our revenue to date has been derived from sales of oscillator systems across our target end markets. We intend to introduce products into the clock IC market, which we began sampling in the second quarter of 2019, and to focus on clock IC and timing sync solutions in the future. We seek to aggressively expand our presence in these two markets.

We sell our products primarily through distributors and resellers, who in turn sell to our end customers. Based on sell-through information provided by these distributors, we believe the majority of our end customers are based in the U.S.

We operate a fabless business model, allowing us to focus on the design, sales, and marketing of our products, quickly scale production, and significantly reduce our capital expenditures. We leverage our global network of distributors and resellers to address the broad set of end markets we serve. For our largest accounts, dedicated sales personnel work with the end customer to ensure that our solutions fully address the end customer’s timing needs. Our smaller customers work directly with our distributors to select the optimum timing solution for their needs.

We were acquired by MegaChips in 2014 and were a wholly-owned subsidiary of MegaChips, a fabless semiconductor company based in Japan and traded on the Tokyo Stock Exchange, until November 25, 2019. On November 25, 2019, we completed the initial public offering of shares of our common stock. MegaChips continues to hold a majority controlling interest in our common stock.

### **Key Factors Affecting Our Performance**

#### ***Customer Orders and Forecasts***

Because our sales are made pursuant to standard purchase orders, orders may be cancelled, reduced, or rescheduled with little or no notice and without penalty. Cancellations of orders could result in the loss of anticipated sales without allowing us sufficient time to reduce our inventory and operating expenses. In addition, changes in forecasts or the timing of orders from customers exposes us to the risks of inventory shortages or excess inventory. We may not be able to fulfill increased demand, at least in the short term, as we do not intend to acquire excess inventory to pre-build custom products.

#### ***Design Wins with New and Existing Customers***

Our solutions enable our customers to differentiate their product offerings and position themselves to gain market share. We work closely with our customers to understand their product roadmaps and strategies. Our end customers continuously develop new products in existing and new application areas. We also consider design wins critical to our future success and anticipate being increasingly dependent on revenue from new design wins for our new higher-end products with higher average selling prices (“ASPs”). The selection process is typically lengthy and may require us to incur significant design and development expenditures in pursuit of a design win with no assurance that our solutions will be selected. As a result, the loss of any key design win or any significant delay in the ramp of volume production of the customer’s products into which our product is designed could adversely affect our business.

### ***Customer Demand and Product Life Cycles***

Once customers design our silicon timing systems solutions into their products, we closely monitor all aspects of their demand cycle, including the initial design phase, prototype production, volume production, and inventories, as well as end-market demand, including seasonality, cyclicity, and the competitive landscape. Given our customer relationships and the long-term aspects of our solutions, we benefit from visibility into customer demand. This in turn provides an opportunity for us to monitor and refine our business fundamentals.

### ***Product Adoption within New Markets and Applications***

As we evaluate new market opportunities and bring new products to market, we pay particular attention to forecasts by industry analysts and the adoption curve of technology. We also analyze in detail potential competing forces that could hinder such adoption. If we fail to anticipate or respond to technological shifts or market demands, or to timely develop new or enhanced products or technologies in response to the same, it could result in decreased revenue and the loss of our design wins to our competitors.

### ***Pricing, Product Cost, and Product Mix***

The ASPs of our products vary significantly. While the ASP of any individual product generally decreases over time, our average ASPs have remained relatively flat as we continue to introduce new higher-end products with higher ASPs. Our pricing and margins depend on the volumes and the features of the timing devices we provide to our customers. We continually monitor and work to reduce the cost of our products and improve the potential value our solutions provide to our customers as we target new design win opportunities and manage the product life cycles of our existing customer designs. Since we rely on third-party wafer foundries and assembly and test contractors to manufacture, assemble, and test our products, we maintain a close relationship with our suppliers to improve quality, increase yields, and lower manufacturing costs.

Gross margin, or gross profit as a percentage of revenue, has been, and will continue to be, affected by a variety of factors, including ASPs, and product mix in a given period, material costs, yields, and manufacturing operations costs. We believe the primary driver of gross margin is the ASPs negotiated between us and our customers relative to material costs and yield improvement. As our products mature and unit volumes increase, we expect their ASPs to decline. These declines often coincide with improvements in manufacturing yields and lower wafer, assembly, and testing costs, which offset some or all of the margin reduction that results from lower ASPs. However, we expect our gross margin to fluctuate on a quarterly basis as a result of changes in ASPs due to new product introductions, existing product transitions into high-volume manufacturing, manufacturing costs, and our product mix.

### ***Cyclical Nature of the Semiconductor Industry***

The semiconductor industry is highly cyclical and is characterized by constant and rapid technological change, rapid product obsolescence, price erosion, evolving standards, short product life cycles, and wide fluctuations in product supply and demand. Downturns in the semiconductor industry, including the current downturn, have been characterized by diminished product demand, production overcapacity, high inventory levels, and accelerated erosion of average selling prices. The current downturn in the semiconductor industry has been attributed to a variety of factors, including the ongoing U.S.-China trade dispute, weakness in demand and pricing for semiconductors across applications, and excess inventory. While this downturn has not directly impacted our business to date, any prolonged or significant downturn in the semiconductor industry generally could adversely affect our business and reduce demand for our products and otherwise harm our financial condition and results of operations.

## Results of Operations

The following table summarizes our results of operations for the periods presented.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands, except percentage)			
Revenue	\$ 84,074	\$ 85,214	\$ (1,140)	(1%)
Cost of revenue	44,516	49,009	(4,493)	(9%)
Gross profit	39,558	36,205	3,353	9%
Operating expenses:				
Research and development	23,795	22,775	1,020	4%
Selling, general and administrative	20,636	21,220	(584)	(3%)
Total operating expenses	44,431	43,995	436	1%
Loss from operations	(4,873)	(7,790)	2,917	(37%)
Interest expense	(1,714)	(1,512)	(202)	13%
Other expense, net	(28)	(66)	38	(58%)
Loss before income taxes	(6,615)	(9,368)	2,753	(29%)
Income tax benefit	8	26	(18)	(69%)
Net loss attributable to common stockholder and comprehensive loss	\$ (6,607)	\$ (9,342)	\$ 2,735	(29%)

## Revenue

We derive revenue primarily from sales of silicon timing products to distributors and resellers who in turn sell to our end customers. We also sell products directly to end customers who integrate our products into their applications. Our sales are made pursuant to standard purchase orders which may be cancelled, reduced or rescheduled, with little or no notice. We recognize product revenue upon shipment when we satisfy our performance obligations as evidenced by the transfer of control of our products to customers. We measure revenue based on the amount of consideration we expect to be entitled to in exchange for products.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands except percentage)			
Revenue	\$ 84,074	\$ 85,214	\$ (1,140)	(1%)

Revenue decreased by \$1.1 million, or 1%, for 2019 compared to 2018. This decrease was primarily due to a decrease of \$5.5 million in revenue from our largest customer mainly resulting from a loss of design win for the 2018 design for one of its products. Such decrease in revenue from the largest customer was offset by an increase in revenue from other customers of \$4.4 million mainly in Asia and due to higher demand of our timing products. The average selling price of our products remained flat year over year.

## Cost of Revenue, Gross Profit, and Gross Margin

Cost of revenue consists of wafers acquired from third-party foundries, assembly, packaging, and test cost of our products paid to third-party contract manufacturers, and personnel and other costs associated with our manufacturing operations. Cost of revenue also includes depreciation of production equipment, inventory write-downs, amortization of internally developed software, shipping and handling costs, and allocation of overhead and facility costs. We also include credits for rebates received from foundries to cost of revenue.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands except percentage)			
Cost of Revenue	\$ 44,516	\$ 49,009	\$ (4,493)	(9%)
Gross Profit	39,558	36,205	3,353	9%
Gross Margin	47%	42%		

Gross profit increased by \$3.4 million in the year ended December 31, 2019 compared to the same period in 2018. The year ended December 31, 2018 was negatively impacted by a net write-down of inventory of \$5.0 million for that period. This written down inventory in 2018 was subsequently partially sold in the year ended December 31, 2019, which led to an increase in gross profit of \$2.5 million for that period. This cumulative positive change in gross profit of \$7.5 million period over period was partially offset by lower gross profit of \$0.6 million resulting from lower sales volume and change in product mix that had lower margins. In addition, margin decreased by \$3.5 million as a result of other overhead expense increases for the year ended December 31, 2019 compared to the same period in 2018. The inventory write-down in 2018 was related to inventory buildup of an anticipated order from our largest end customer that did not materialize.

Gross margin was higher by 5% in the year ended December 31, 2019 compared to the same period in 2018 largely due to the inventory write-down recorded in the year ended December 31, 2018, which negatively impacted margin by 6%. This written down inventory was partially sold subsequently in the year ended December 31, 2019 which generated additional benefit to gross margin of 3%. This cumulative benefit of 9% was partially offset by 4% lower gross margin generated from lower sales volume, sale of lower margin products and other overhead expense increases for the year ended December 31, 2019 compared to the same period in 2018.

## Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of our operating expenses and consist of salaries, benefits, bonuses, stock-based compensation, and commissions. Our operating expenses also include consulting costs, allocated costs of facilities, information technology, and depreciation. We expect our operating expenses to fluctuate in absolute dollars and as a percentage of revenue over time.

### Research and Development

Our research and development efforts are focused on the design and development of next-generation silicon timing systems solutions. Our research and development expense consists primarily of personnel costs, which include stock-based compensation, pre-production engineering mask costs, software license and intellectual property expenses, design tools and prototype-related expenses, facility costs, supplies, professional and consulting fees, and allocated overhead costs. We expense research and development costs as incurred. We believe that continued investment in our products and services is important for our future growth and acquisition of new customers and, as a result, we expect our research and development expenses to continue to increase in absolute dollars. However, we expect our research and development expense to fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

### Sales, General and Administrative

Sales, general and administrative expense consists of personnel costs, including stock-based compensation, professional and consulting fees, accounting and audit fees, legal costs, field application engineering support, travel costs, advertising expenses, and allocated overhead costs. We expect sales, general and administrative expense to continue to increase in absolute dollars as we increase our personnel and grow our operations, although it may fluctuate as a percentage of revenue from period to period depending on the timing of these expenses.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands except percentage)			
Operating Expenses:				
Research and development	\$ 23,795	\$ 22,775	\$ 1,020	4%
Selling, general and administrative	20,636	21,220	(584)	(3%)
Total operating expenses	\$ 44,431	\$ 43,995	\$ 436	1%

Research and development expense increased by \$1.0 million, or 4%, for the year ended December 31, 2019 compared to the same period in 2018, primarily due to an increase in engineering tape-outs, supplies, and other expenses of \$1.3 million. Additionally, capitalized labor costs for development of internal use software was lower

by \$1.0 million which led to lower capitalization of expense in the year ended December 31, 2019. The increase was partially offset by lower stock-based compensation expense of \$1.3 million which was largely due to two-quarters of stock-based compensation expense incurred for the year ended December 31, 2018 compared to a partial quarter expense in 2019. This is due to the timing of grants of new employee awards upon completion of our initial public offering in November 2019.

Selling, general and administrative expense decreased by \$0.6 million, or 3%, for the year ended December 31, 2019 compared to the same period in 2018, primarily due to lower personnel costs of \$1.3 million largely related to lower variable compensation tied to revenue. Additionally, stock-based compensation expenses decreased by \$0.3 million for the year. These decreases were offset by higher legal expenses of \$1.0 million year over year in connection with our patent litigation matter.

### Other Expense

Other income (expense) consists primarily of interest expense on our outstanding debt, foreign exchange gains and losses, and asset dispositions. See Note 7 to our consolidated financial statements under Item 8 for more information about our debt.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands except percentage)			
Interest Expense	\$ (1,714)	\$ (1,512)	\$ (202)	13%
Other expense, net	(28)	(66)	38	(58%)
Total other expense	\$ (1,742)	\$ (1,578)	\$ (164)	10%

Other expense increased \$0.2 million for the year ended December 31, 2019 compared to the same period in 2018, primarily as a result of higher interest rates on our outstanding revolving short-term debt during the year ended December 31, 2019 as compared to 2018.

### Income Tax Benefit (Expense)

Income tax expense consists primarily of state income taxes and income taxes in certain foreign jurisdictions in which we conduct business. We have a full valuation allowance for deferred tax assets as the realization of the full amount of our deferred tax asset is uncertain, including NOL, carryforwards, and tax credits related primarily to research and development. We expect to maintain this full valuation allowance until realization of the deferred tax assets becomes more likely than not. At December 31, 2019 and 2018, we had NOL carryforwards of approximately \$220.2 million and \$224.6 million for U.S. federal and state income tax purposes, respectively, and had research and development tax credit carryforwards of approximately \$7.5 million and \$8.7 million for U.S. federal and state income tax purposes, respectively. Of the federal NOL carryforwards, approximately \$148.3 million will expire in various years through 2036, if not utilized, and approximately \$8.0 million will carry forward indefinitely. NOL carryforwards for state income tax purposes, if not utilized, will expire in various years through 2039. The research and development credit carryforwards for federal tax purposes will expire in various years through 2038, and state tax credits carry forward indefinitely.

	Year Ended December 31,		Change 2019 vs 2018	
	2019	2018	\$	%
	(in thousands except percentage)			
Income tax benefit	\$ 8	\$ 26	\$ (18)	(69%)

### Liquidity and Capital Resources

Before our initial public offering in November 2019, we financed our operations primarily through cash generated from product sales and proceeds from our credit facilities, including proceeds from our loan agreement with MegaChips. As of December 31, 2019 and 2018, we had cash and cash equivalents of \$63.4 million and \$7.9 million, respectively. Our principal use of cash is to fund our operations to support growth. We believe that our existing cash and cash equivalents and funds available for borrowing under our credit facilities of an aggregate of

approximately \$59.0 million as of December 31, 2019, will be sufficient to meet our cash needs for at least the next 12 months. Over the longer term, our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our sales and marketing and research and development expenditures, and the continuing market acceptance of our solutions. In the event that we need to borrow funds or issue additional equity, we cannot provide any assurance that any such additional financing will be available on terms acceptable to us, if at all. If we are unable to raise additional capital when we need it, it would harm our business, results of operations and financial condition.

### **Cash Flows**

The following table summarizes our cash flows for the periods indicated:

	<b>Year Ended December 31,</b>	
	<b>2019</b>	<b>2018</b>
	(in thousands)	
Net cash provided by (used in) operating activities	\$ 7,378	\$ (1,046)
Net cash used in investing activities	(3,202)	(5,012)
Net cash provided by financing activities	51,353	4,850
Net increase (decrease) in cash and cash equivalents	<u>\$ 55,529</u>	<u>\$ (1,208)</u>

### **Operating Activities**

In 2019, cash provided by operating activities of \$7.4 million was primarily due to a net loss of \$6.6 million offset by non-cash expenses of \$11.4 million and a decrease in operating assets and liabilities of \$2.6 million. Non-cash expenses were mainly related to depreciation and amortization, stock-based compensation expense, inventory write-down and non-cash operating lease costs and other. Operating assets and liabilities decreased primarily due to a decrease in inventories as we managed our inventory levels and lower accounts receivable due to timing of shipments and collections, partially offset by higher prepaid expenses and other current assets related to advance payments to suppliers for inventory, lower accounts payable, accrued expenses and other liabilities including lease liabilities due to timing of payments.

In 2018, cash used in operating activities of \$1.0 million was primarily due to a net loss of \$9.3 million and an increase in operating assets and liabilities of \$9.1 million offset by non-cash expenses of \$17.4 million. The increase in operating assets and liabilities was primarily due to increased inventories to support our future product sales and lower accounts payable offset by lower accounts receivable, decreased prepaid expenses and other current assets due to utilization of prepaid assets, and an increase in accrued expenses and other liabilities. Non-cash items included depreciation and amortization, stock-based compensation expense, and inventory write-down.

### **Investing Activities**

Our investing activities consist primarily of capital expenditures for property and equipment purchases. Our capital expenditures for property and equipment have primarily been for general business purposes, including machinery and equipment, leasehold improvements, acquired software, internally developed software used in production and support of our products, computer equipment used internally, and production masks to manufacture our products.

In 2019, cash used in investing activities was \$3.2 million and consisted primarily of the purchase of production masks, internally developed software, and other property and equipment for general business purposes.

In 2018, cash used in investing activities was approximately \$5.0 million and consisted primarily of the purchase of production masks, internally developed software, and other property and equipment for general business purposes.

### Financing Activities

Cash provided by financing activities includes proceeds from borrowings under our credit facilities and proceeds from issuance of shares.

In 2019, cash provided by financing activities was \$51.4 million, consisting of \$56.4 million of proceeds from the initial public offering, net of issuance costs offset by repayments of \$5.0 million under our short-term revolving line of credit.

In 2018, cash provided by financing activities was \$4.9 million, consisting of borrowings of \$21.0 million under our short-term revolving line of credit and investment received from MegaChips of \$1.9 million, partially offset by repayments of \$18.0 million under our short-term revolving line of credit. During the year ended December 31, 2018, our outstanding balance on our short-term revolving lines of credit ranged from \$40.0 million to \$43.0 million and our borrowings from MegaChips were \$3.0 million during the year.

### Debt Obligations

The following summarizes principal loan balances for the years ended December 31, 2019 and 2018:

	As of	
	December 31, 2019	December 31, 2018
	(in thousands)	
Revolving line of credit:		
MUFG	\$ 41,000	\$ 41,000
SMBC	—	2,000
MegaChips loan	—	3,000
Balance	41,000	46,000
Less: current portion of long-term debt	(41,000)	(46,000)
Long-term debt less current portion	\$ —	\$ —

As of December 31, 2019, remaining available credit line from MUFG was \$9.0 million, SMBC was \$20.0 million and MegaChips was \$30.0 million.

The following summarizes our total debt obligations as of December 31, 2019 and with further details on the term of the loans and interest payable on maturity:

Lender	As of December 31, 2019				
	Loan Start Date(1)	Maturity Date	(dollars in thousands)		
			Principal obligations	Interest obligations	Total debt obligations
MUFG	8/23/2019	2/19/2020	\$ 3,000	\$ 47	\$ 3,047
MUFG	12/19/2019	6/10/2020	38,000	545	38,545
			<u>\$ 41,000</u>	<u>\$ 592</u>	<u>\$ 41,592</u>

As of December 31, 2018

Lender	Loan Start Date(1)	Maturity Date	(dollars in thousands)		
			Principal obligations	Interest obligations	Total debt obligations
MUFG	6/29/2018	6/28/2019	\$ 20,000	\$ 742	\$ 20,742
MUFG	8/23/2018	8/23/2019	3,000	115	3,115
MUFG	9/24/2018	9/24/2019	8,000	314	8,314
MegaChips	10/1/2018	12/31/2018	3,000	24	3,024
MUFG	12/19/2018	12/19/2019	10,000	413	10,413
SMBC	12/19/2018	12/19/2019	2,000	101	2,101
			\$ 46,000	\$ 1,709	\$ 47,709

(1) Loan start date refers to the most recent renewal date.

Refer to Note 7 of our consolidated financial statements under Item 8 for more information on our debt obligations.

### Contractual Obligations and Commitments

Set forth below is information concerning our contractual commitments and obligations as of December 31, 2019:

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(in thousands)				
Debt obligations	\$ 41,000	\$ 41,000	—	—	—
Operating leases	11,191	2,108	2,850	3,021	3,212
Purchase obligations	852	852	—	—	—
Total	\$ 53,043	\$ 43,960	\$ 2,850	\$ 3,021	\$ 3,212

Obligations under contracts that we can cancel without a significant penalty are not included in the table above. The aggregate amount of our obligations under these contracts is approximately \$16.3 million as of December 31, 2019.

We signed an operating lease agreement for our corporate headquarters in Santa Clara, California that commenced on October 20, 2016 and will expire on December 31, 2026. The agreement provides for an option to renew for an additional five years and for rent payments through the term of the lease payment. We also lease office space in Michigan, Malaysia, Japan, the Netherlands, and Ukraine, and under all operating leases with various expiration dates through May 2021.

We purchase components and wafers from a variety of suppliers and use several contract manufacturers to provide manufacturing services for its products. A significant portion of our reported purchase commitments arising from these agreements consists of firm, non-cancellable and unconditional purchase commitments once the production has started. In certain instances, these agreements allow us the option to cancel, reschedule, and adjust our requirements based on its business needs prior to firm orders being placed.

### **Off-Balance Sheet Arrangements**

During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### **Critical Accounting Policies and Estimates**

Our consolidated financial statements have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

The critical accounting policies requiring estimates, assumptions, and judgments that we believe have the most significant impact on our consolidated financial statements are described below.

#### ***Revenue Recognition***

We derive our revenue from product sales to distributors and resellers, who in turn sell to original equipment manufacturers or other end customers. We recognize product revenue, at a point in time, upon shipment when we satisfy our performance obligations as evidenced by the transfer of control of our products to customers. We measure revenue based on the amount of consideration we expect to be entitled to in exchange for products. Variable consideration is estimated and reflected as an adjustment to the transaction price. We determine variable consideration, which consists primarily of price adjustments and product returns by estimating the amount of consideration we expect to receive from our customers based on historical experience of price adjustments and product returns. Initial estimates of price adjustments and product returns are updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented. Since our performance obligations relate to contracts with a duration of less than one year, we do not disclose the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period.

As a practical expedient, we record the incremental costs of obtaining a contract, consisting primarily of sales commissions, when incurred because the amortization period is one year or less. The costs are recorded within sales and marketing expenses.

Our payment terms vary by contract type and type of customer and generally range from 30 to 60 days from shipment. We have also elected to recognize the cost for freight and shipping when control over the products sold passes to customers and revenue is recognized.

We entered into a distribution agreement with MegaChips, whereby we appointed MegaChips as the exclusive distributor of our products in Japan. We recognize revenue derived from sales of products through MegaChips in the amount of expected payments from parties which purchased the products, as adjusted for estimated price concessions and product returns.

### ***Inventory***

Inventories consist of raw and processed wafers, work-in-process, and finished goods and are stated at the lower of standard cost or net realizable value. Standard costs approximate actual costs and are based on a first-in, first-out basis. We perform detailed reviews of the net realizable value of inventories, both on hand as well as for inventories that we are committed to purchase and write-down the inventory value for estimated deterioration, excess and obsolete and other factors based on management's assessment of future demand and market conditions, and may require estimates that may include uncertain elements. Actual demand may differ from forecasted demand and such differences may have a material effect on recorded value of inventory. Once written-down, inventory write-downs are not reversed until the inventory is sold or scrapped.

### ***Stock-Based Compensation***

Stock-based compensation expense is measured at the grant date based on the fair value of the equity award and is recognized as expense over the requisite service period, which is generally the vesting period. We have elected to recognize forfeitures as they occur.

#### *Fair value of awards issued prior to initial public offering*

We had not issued stock-based awards since our acquisition by MegaChips in 2014, and did not have any outstanding equity awards prior to the initial public offering. However, MegaChips, in consultation with our management, had granted restricted stock units ("RSUs"), to certain of our employees. Compensation expense related to stock-based awards was measured and recognized in the financial statements at fair value. We estimated the fair value of each equity award on the date of grant using the trading price of the MegaChips stock in Japan and recognized the related stock-based compensation expense on a straight-line method.

The MegaChips shares granted to the employees had a one-year holding period from the date of vesting. Due to the exercise restriction of one-year at the time of vesting, we had committed to advance cash to employees to pay for payroll taxes that were due on vesting instead of issuing the employees restricted shares. The liability associated with the cash expense paid to the employee in lieu of restricted shares was treated as liability based awards and was valued based on the estimate of the market price of the shares at the reporting date and the liability was adjusted accordingly.

#### *Fair value of awards issued after initial public offering*

Upon completion of its IPO in November 2019, we adopted the SiTime Corporation 2019 Stock Incentive Plan (the "2019 Plan"). Compensation expense for the RSUs granted under the 2019 Plan are measured and recognized in the financial statements at fair value. We estimate the fair value of each equity award on the date of grant using the closing market price of our common stock on the date of grant.

### ***Income Taxes***

Deferred tax liabilities and assets are recognized for the expected future tax consequences of temporary differences between financial statement carrying amounts and the tax basis of assets and liabilities and net operating loss and tax credit carryforwards. Valuation allowances are established when necessary to reduce deferred tax assets to a level which, more likely than not, will be realized.

A tax position can be recognized only if it is more likely than not to be sustained based solely on its technical merits as of the reporting date and then only in an amount more likely than not to be sustained upon review by the tax authorities. We consider many factors when evaluating and estimating its tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes.

## ***Segment Reporting***

We operate as one reportable segment related to the design, development, and sale of silicon timing systems solutions. Our chief operating decision maker is our Chief Executive Officer. Our Chief Executive Officer reviews operating results on an aggregate basis and manages our operations as a whole for the purpose of evaluating financial performance and allocating resources. Accordingly, we have determined that we have a single reportable and operating segment structure. Substantially all of our long-lived assets were attributable to operations in the United States as of December 31, 2019.

## **JOBS Act Transition Period**

The JOBS Act was enacted in April 2012. Section 107(b) of 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. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

## **Recent Accounting Pronouncements**

See Note 2 to our consolidated financial statements under Item 8 for information regarding recently issued accounting pronouncements.

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

### ***Foreign Currency Risk***

Substantially all of our revenue is denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States and, to a lesser extent, in Malaysia, the Netherlands, Taiwan, Japan, and Ukraine. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have a material impact on our historical consolidated financial statements. We do not currently have a hedging policy with respect to foreign currency exchange risk.

### ***Interest Rate Risk***

We had cash and cash equivalents of \$63.4 million and \$7.9 million as of December 31, 2019 and 2018, respectively, consisting of bank deposits. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant. We also had total outstanding debt of \$41.0 million and \$46.0 million as of December 31, 2019 and 2018, of which all are due within 12 months, and we plan to renew some of those loans for another term to be determined by us.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. Our exposure to interest rates relates to the change in the amounts of interest we must pay on our short-term revolving line of credit which changes at time of renewals. The effect of a hypothetical 10% change in interest rates applicable to our business would not have a material impact on our historical consolidated financial statements.

**Item 8. Financial Statements and Supplementary Data.**

**Index to Consolidated Financial Statements and Financial Statement Schedule**

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## Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors  
SiTime Corporation  
Santa Clara, California

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of SiTime Corporation (the “Company”) as of December 31, 2019 and 2018, the related consolidated statements of operations and comprehensive income (loss), stockholders’ equity, and cash flows for each of the years then ended, and the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cashflows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

### Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements the Company changed its method of accounting for leases during the year ended December 31, 2019, due to the adoption of the Accounting Standard Codification Topic 842, “Leases.”

### Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, LLP

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

San Jose, California

March 2, 2020

**SiTime Corporation**  
**Consolidated Balance Sheets**

	As of	
	December 31, 2019	December 31, 2018
	(in thousands, except per share data)	
<b>Assets:</b>		
Current assets:		
Cash and cash equivalents	\$ 63,418	\$ 7,889
Accounts receivable, net	17,659	19,180
Related party accounts receivable	1,073	1,436
Inventories	11,911	20,543
Prepaid expenses and other current assets	5,601	4,056
Total current assets	99,662	53,104
Property and equipment, net	9,288	11,281
Intangible assets, net	4,489	8,142
Right-of-use assets, net	9,790	—
Other assets	162	162
Total assets	\$ 123,391	\$ 72,689
<b>Liabilities and Stockholders' Equity:</b>		
Current liabilities:		
Accounts payable	\$ 3,869	\$ 5,025
Accrued expenses and other current liabilities	8,442	7,655
Related party loan obligations	—	3,000
Loan obligations	41,000	43,000
Total current liabilities	53,311	58,680
Deferred rent	—	2,436
Lease liabilities	7,940	—
Other long-term liabilities	—	558
Total liabilities	61,251	61,674
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Common stock, \$0.0001 par value - 200,000 shares authorized; 14,968 and 10,000 shares issued and outstanding at December 31, 2019 and December 31, 2018	2	1
Additional paid-in capital	116,162	58,431
Accumulated deficit	(54,024)	(47,417)
Total stockholders' equity	62,140	11,015
Total liabilities and stockholders' equity	\$ 123,391	\$ 72,689

The accompanying notes are an integral part of the consolidated financial statements.

## SiTime Corporation

## Consolidated Statements of Operations and Comprehensive Income (Loss)

	Year Ended	
	December 31, 2019	December 31, 2018
	(in thousands, except per share data)	
Revenue	\$ 84,074	\$ 85,214
Cost of revenue	44,516	49,009
Gross profit	39,558	36,205
Operating expenses:		
Research and development	23,795	22,775
Selling, general and administrative	20,636	21,220
Total operating expenses	44,431	43,995
Loss from operations	(4,873)	(7,790)
Interest expense	(1,714)	(1,512)
Other expense, net	(28)	(66)
Loss before income taxes	(6,615)	(9,368)
Income tax benefit	8	26
Net loss	\$ (6,607)	\$ (9,342)
Net loss attributable to common stockholder and comprehensive loss	\$ (6,607)	\$ (9,342)
Net loss per share attributable to common stockholder, basic and diluted	\$ (0.63)	\$ (0.93)
Weighted-average shares used to compute basic and diluted net loss per share	10,558	10,000

The accompanying notes are an integral part of the consolidated financial statements.

## SiTime Corporation

## Consolidated Statements of Stockholders' Equity

	Common Stock		Additional Paid-in Capital (in thousands)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
<b>Balances at December 31, 2017</b>	10,000	\$ 1	\$ 55,750	\$ (38,075)	\$ 17,676
Investment from MegaChips	—	—	1,850	—	1,850
Stock-based compensation expense	—	—	831	—	831
Net loss	—	—	—	(9,342)	(9,342)
<b>Balances at December 31, 2018</b>	10,000	1	58,431	(47,417)	11,015
Stock-based compensation expense	—	—	1,379	—	1,379
Net loss	—	—	—	(6,607)	(6,607)
Issuance of common stock upon initial public offering net of underwriting discounts and commissions and other offering costs	4,945	1	56,352	—	56,353
Common stock issued in connection with vesting of restricted stock units	23	—	—	—	—
<b>Balances at December 31, 2019</b>	<u>14,968</u>	<u>\$ 2</u>	<u>\$ 116,162</u>	<u>\$ (54,024)</u>	<u>\$ 62,140</u>

The accompanying notes are an integral part of the consolidated financial statements.

SiTime Corporation

Consolidated Statements of Cash Flows

	Year Ended	
	December 31, 2019	December 31, 2018
	(in thousands)	
<b>Cash flows from operating activities:</b>		
Net loss	\$ (6,607)	\$ (9,342)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities		
Depreciation and amortization expense	8,273	7,413
Non-cash operating lease cost and other	1,380	—
Stock-based compensation expense	1,379	831
Inventory write-down	321	9,165
Changes in assets and liabilities:		
Accounts receivable, net	1,521	1,688
Related party accounts receivable	363	326
Inventories	8,144	(13,982)
Prepaid expenses and other current assets	(3,145)	2,572
Accounts payable	(1,148)	(648)
Accrued expenses and other liabilities	(919)	1,122
Lease liabilities	(2,184)	—
Other assets and liabilities	—	(191)
Net cash provided by (used in) operating activities	<u>7,378</u>	<u>(1,046)</u>
<b>Cash flows from investing activities</b>		
Purchase of property and equipment	(1,426)	(2,314)
Cash paid for intangibles	(1,776)	(2,698)
Net cash used in investing activities	<u>(3,202)</u>	<u>(5,012)</u>
<b>Cash flows from financing activities</b>		
Proceeds from initial public offering, net of underwriting discounts and commissions and other offering costs	56,353	—
Proceeds from loans from financial institutions	—	21,000
Proceeds from investment from MegaChips	—	1,850
Principal payments on loan to MegaChips	(3,000)	—
Principal payments on loan to financial institutions	(2,000)	(18,000)
Net cash provided by financing activities	<u>51,353</u>	<u>4,850</u>
Net increase (decrease) in cash and cash equivalents	55,529	(1,208)
<b>Cash and cash equivalents</b>		
Beginning of period	7,889	9,097
End of period	<u>\$ 63,418</u>	<u>\$ 7,889</u>
<b>Supplemental disclosure of cash flow information</b>		
Interest paid during the period	2,167	1,310
Income taxes paid	1	1
<b>Supplemental disclosure of noncash flow information</b>		
Unpaid property and equipment	77	61
Unpaid intangibles	558	1,116

The accompanying notes are an integral part of the consolidated financial statements.

## Notes to Consolidated Financial Statements

**1. The Company and Summary of Significant Accounting Policies**

SiTime Corporation (the “Company”), was incorporated in the State of Delaware in December 2003. The Company is a provider of silicon timing systems. The Company primarily supplies oscillator products that are comprised of a MEMS resonator and clock IC that is integrated into a package, as well as standalone resonators. The Company has also started to sample clock ICs. The Company’s products are designed to address a wide range of applications across a broad array of end markets. The Company operates a fabless business model and leverages its global network of distributors and resellers to address the broad set of end markets that it serves. The Company was a wholly-owned subsidiary of MegaChips Corporation (“MegaChips”), a fabless semiconductor company based in Japan and traded on the Tokyo Stock Exchange until it completed its initial public offering in November 2019. MegaChips is now the largest shareholder of the Company and held approximately 66.8% of the Company’s outstanding common stock as of December 31, 2019.

**Reporting Calendar**

The Company’s fiscal year begins on January 1 of the year stated and ends on December 31 of the same year. The Company reports its results on a calendar year basis.

**Principles of Consolidation**

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

**Initial Public Offering**

On November 25, 2019, the Company completed its initial public offering (“IPO”), in which it issued and sold 4,945,000 shares of its common stock including the full exercise of the underwriters’ over-allotment option to purchase an additional 645,000 shares at \$13.00 per share, resulting in net proceeds of \$56.4 million after deducting underwriting discounts and commissions of \$7.9 million and deferred offering costs of \$3.4 million.

Deferred offering costs consist primarily of accounting, legal, and other fees related to the Company’s IPO. Prior to the IPO, all deferred offering costs were capitalized in other assets, non-current in the consolidated balance sheets. After the IPO, \$3.4 million of deferred offering costs were reclassified into stockholders’ equity as a reduction of the IPO proceeds in the consolidated balance sheet. We had no deferred offering costs within other assets, non-current in the consolidated balance sheet as of December 31, 2019 and 2018.

**Stock Split**

On October 16, 2019, a pricing committee of the Company’s board of directors approved an amendment and restatement of the Company’s certificate of incorporation to (i) increase the total number of authorized shares of its common stock to 200,000,000 shares, (ii) change the par value of its common stock to \$0.0001 per share, and (iii) effect a 30,000-for-1 stock split of its common stock, which was within the range previously approved by its sole stockholder. These changes became effective upon filing of the Company’s amended and restated certificate of incorporation on October 18, 2019. Subsequently, on November 6, 2019, the Company’s board of directors and sole stockholder approved an amendment and restatement of the Company’s certificate of incorporation to effect a 2-for-3 reverse stock split of its common stock, which became effective on November 6, 2019. The share and per share amounts in these consolidated financial statements and accompanying notes have been adjusted to reflect such stock split and reverse stock split.

## 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 consolidated financial statements and accompanying notes. The more significant areas requiring the use of management estimates and assumptions include revenue recognition, estimate of reserve for excess and obsolete inventories, sales and warranty reserves, estimate of reserves for accounts receivable, internally developed software capitalization, and valuation allowances for deferred tax assets. Actual results may differ materially from such estimates. Management believes that the estimates, and judgments upon which they rely, are reasonable based upon information available to them at the time that these estimates and judgments are made. To the extent that there are material differences between these estimates and actual results, the Company's consolidated financial statements will be affected.

## Foreign Currency Remeasurement

The Company and its wholly owned subsidiaries use the U.S. dollar as the functional currency. Foreign currency assets and liabilities are remeasured into U.S. dollars at the end-of-period exchange rates except for non-monetary assets and liabilities, which are measured at historical exchange rates. Revenue and expenses are remeasured using an average exchange rate in effect for the period, except for items related to non-monetary assets and liabilities, which are measured at historical exchange rates. Gains or losses from foreign currency remeasurement and transactions are included in other expense, net. For the years ended December 31, 2019 and 2018, foreign currency remeasurement and transactions gains and losses were less than \$0.1 million.

## Cash and Cash Equivalents

Cash and cash equivalents consist of cash balances in the Company's bank checking and savings accounts and liquid short-term investments with original or remaining maturities of three months or less at the date of purchase, readily convertible to known amounts of cash.

## Fair Value Measurements

The carrying amounts of the Company's financial instruments, which include cash equivalents, accounts receivable, accounts payable, accrued liabilities, short-term debt obligations, and other current liabilities, approximate their fair values due to their short maturities. The Company determines fair value measurements used in its consolidated financial statements based upon 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 fair value hierarchy distinguishes between (i) market participant assumptions developed based on market data obtained from independent sources (observable inputs), and (ii) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs).

The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

Level 1: Valuations based on quoted prices in active markets for identical assets or liabilities that the entity has the ability to access.

Level 2: Valuations based on quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable data for substantially the full term of the assets or liabilities.

Level 3: Valuations based on inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

At December 31, 2019 and 2018, cash balances in bank checking and savings accounts of \$28.4 million and \$7.9 million, were valued using Level 1 of the fair value hierarchy. At December 31, 2019, highly liquid money market funds of \$35.0 million were valued using Level 1, of the fair value hierarchy, quoted prices in active markets for identical assets and are included in cash equivalents.

There were no transfers between Level 1 and Level 2 categories during any of the periods presented.

### Accounts Receivable and Allowances for Doubtful Accounts

Accounts receivable are stated at amounts estimated by management to be net realizable value. An allowance for doubtful accounts is recorded when it is probable that amounts will not be collected based on historical collection trends, age of outstanding receivables, specific customer circumstances, and existing economic conditions. Accounts receivable are written-off when it becomes apparent that such amounts will not be collected. As of December 31, 2019 and 2018, the allowances for doubtful accounts were \$0.1 million and \$0.2 million, respectively.

### Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. The Company's cash and cash equivalents amount is subject to concentration of credit risk. The Company maintains some cash and cash equivalents balances that are in excess of Federal Deposit Insurance Corporation insurance limits with financial institutions.

The Company extends credit based on an evaluation of the customer's financial condition and collateral is not typically required. The Company primarily sells its products through third-party distributors and resellers. For the years ended December 31, 2019 and 2018, three distributors directly accounted for 10% or more of the Company's revenue.

The following table discloses these customers' percentage of revenue for the respective periods:

Customer	Year Ended December 31,	
	2019	2018
Quantek Technology Corporation	22%	20%
Arrow Electronics, Inc.	19	18
Pernas Electronics Co. Ltd.	17	27

At December 31, 2019 and 2018, three customers accounted for 10% or more of accounts receivable, as disclosed below:

Customer	As of December 31,	
	2019	2018
Quantek Technology Corporation	32%	34%
Arrow Electronics, Inc.	26	23
Pernas Electronics Co. Ltd.	12	23

### Inventory

Inventory is stated at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or net realizable value. The Company, at least quarterly, assesses the recoverability of all inventories to determine whether adjustments are required to record inventory at the lower of cost or net realizable value. The Company reduces the value of inventory by establishing excess and obsolete inventories reserves based on management's assessment of future demand and market conditions, and may require estimates that may include uncertain elements. Actual demand may differ from forecasted demand and such differences may have a material effect on recorded value of inventory. Inventory write-downs, once established, are not released until the related inventory has been sold or scrapped. Rebates from the Company's foundries are recorded as a reduction of inventory cost and are recognized in cost of revenue over the inventory turnover days of the Company. Most of the Company's inventory is warehoused at its contract manufacturers.

## Property and Equipment

Property and equipment are recorded at cost, less accumulated depreciation. Depreciation of property and equipment is recognized on a straight-line basis over the estimated useful lives of the respective assets as follows:

Lab equipment	3 to 5 years
Computer equipment	3 years
Furniture and fixtures	5 years
Leasehold improvements	Shorter of remaining lease term or estimated useful lives of the assets

The Company capitalizes the costs of purchased mask sets that are utilized during the photolithography phase of manufacturing our products, when technological feasibility and marketability have been established. The capitalization occurs upon the completion of a detailed design, the absence of significant development uncertainties and the determination of market acceptance. Such amounts are included in property and equipment in the consolidated balance sheets and are amortized to cost of revenue over their estimated useful lives. However, if significant uncertainties exist regarding the future utility of a particular mask set, then its related costs are expensed to research and development at the time the significant uncertainties are identified.

Maintenance and repair costs are charged to expense as incurred, and expenditures that extend the useful lives of assets are capitalized. Upon retirement or sale of the property and equipment, the cost and related accumulated depreciation are removed from the balance sheet and the resulting gain or loss is recorded in other expense, net.

## Intangible Assets

Intangible assets include the costs related to acquired software as well as costs related to software internally developed, or modified solely to meet the Company's internal requirements, with no substantive plans to market such software at the time of development. The Company develops proprietary design automation software for its MEMS-based resonators. Costs incurred during the preliminary planning and evaluation stage of the project and during post implementation operational stage are expensed as incurred. Costs incurred during the application development stage of the software are capitalized. The Company defines the configuration and coding process as the application development stage. Capitalized internal use software costs are amortized, on a straight-line basis under cost of revenue over the estimated useful life of approximately 2 to 3 years. Purchased intangibles with finite lives are amortized using the straight-line method over the estimated economic lives of the assets of 3 years.

## Leases

The Company applies the guidance in Accounting Standards Codification ("ASC"), Topic 842 to individual leases of assets. The Company recognizes a transaction as a lease when it receives substantially all of the economic benefits from and directs the use of specified property, plant and equipment.

Operating leases are included in right-of-use ("ROU"), assets, accrued expenses and other current liabilities, and lease liabilities in the Company's consolidated balance sheets. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the present value of the Company's obligation to make lease payments arising from the lease. The Company currently does not have any finance leases.

The Company has elected the practical expedient within ASC Topic 842 to not separate lease and non-lease components within lease transactions for all classes of assets. Additionally, the Company has elected the short-term lease exception for all classes of assets and does not apply the recognition requirements for leases of 12 months or less, and recognizes lease payments for short-term leases as expense either straight-line over the lease term or as incurred depending on whether the lease payments are fixed or variable. These elections are applied consistently for all leases.

When discount rates implicit in leases cannot be readily determined, the Company uses the applicable incremental borrowing rate at lease commencement to perform lease classification tests on lease components and to measure ROU assets and lease liabilities. The incremental borrowing rate used by the Company was based on the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term, an amount equal to the lease payments in a similar economic environment.

### **Impairment of Long-Lived Assets**

The Company evaluates its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets.

The Company determined that no events or changes in circumstances indicate that impairment of its long-lived assets has occurred.

### **Warranty**

The Company provides limited lifetime warranty coverage on all of its products by guaranteeing that all timing components from the Company will be free from defects in workmanship and materials and will conform to specifications for the life of the system. This assurance-type warranty is not considered a separate performance obligation, and thus no transaction price is allocated to it. The Company records the warranty costs in cost of revenue in the consolidated statements of operations and comprehensive income (loss). The warranty reserve is calculated using historical claim information to project future warranty claims activity and is recorded within accrued expenses and other current liabilities and other long-term liabilities on the consolidated balance sheets based on the expected timing of the related payments. To date, the Company has had negligible returns of any defective products, and hence the warranty reserve balances as of December 31, 2019 and 2018 were less than \$0.1 million.

### **Income Taxes**

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the carrying amounts in the consolidated financial statements of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards, using enacted tax rates in effect for the year in which the differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in earnings in the period that includes the enactment date. A valuation allowance is provided in order to reduce the deferred tax assets to a level which, more likely than not, will be realized.

The Tax Cuts and Jobs Act of 2017 (the "Tax Act"), makes broad and complex changes to the U.S. tax code. These computations require significant judgments and estimates to be made regarding the interpretation of the provisions within the Tax Act along with the preparation and analysis of information not previously required. In conjunction with the Tax Act, the SEC staff issued Staff Accounting Bulletin No. 118, *Income Tax Accounting Implications of the Tax Act*, which provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, *Income Taxes*.

While the Company believes it has adequately reserved for its uncertain tax positions, no assurance can be given that the final tax outcome of these matters will not be different. The Company adjusts these reserves in light of changing facts and circumstances, such as the closing of a tax audit. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will impact the provision for income taxes and the effective tax rate in the period in which such determination is made.

The Company recognizes tax positions in the consolidated financial statements only when it is more likely than not that the position will be sustained upon examination by the relevant taxing authority. Liabilities are established for differences between positions taken in a tax return and amounts recognized in the consolidated financial statements. The Company reports interest and penalties related to uncertain tax positions, if any, in the provision for income taxes in the consolidated statements of operations and comprehensive income (loss). To the extent that accrued interest and penalties do not ultimately become payable, amounts accrued will be reduced and reflected as a reduction of the overall provision for income taxes in the period that such determination is made.

### **Revenue Recognition**

The Company derives revenue from its product sales to distributors and resellers, who in turn sell to original equipment manufacturers or other end customers. The Company recognizes product revenue, at a point in time, upon shipment when it satisfies its performance obligations as evidenced by the transfer of control of its products to customers. The Company measures revenue based on the amount of consideration it expects to be entitled to in exchange for products. Variable consideration is estimated and reflected as an adjustment to the transaction price. The Company determines variable consideration, which consists primarily of price adjustments and product returns by estimating the amount of consideration the Company expects to receive from its customers based on historical experience of price adjustments and product returns. Initial estimates of price adjustments and product returns are updated at the end of each reporting period if additional information becomes available. Changes to the Company's estimated variable consideration were not material for the periods presented. Since the Company's performance obligations relate to contracts with a duration of less than one year, it does not disclose the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period.

The Company's payment terms vary by contract type and type of customer and generally range from 30 to 60 days from shipment. The Company has also elected to recognize the cost for freight and shipping when control over the products sold passes to customers and revenue is recognized.

As a practical expedient, the Company records the incremental costs of obtaining a contract, consisting primarily of sales commissions, when incurred because the amortization period is one year or less. These costs are recorded within sales and marketing expenses. The Company entered into a distribution agreement with MegaChips, whereby the Company appointed MegaChips as the exclusive distributor of its products in Japan. The Company recognizes revenue upon shipment derived from sales of products through MegaChips in the amount of expected payments from parties which purchased the products as adjusted for estimated price concessions and product returns.

### **Cost of Revenue**

Cost of revenue consists of wafers acquired from third-party foundries, assembly, packaging, and test cost of the Company's products paid to third-party contract manufacturers, and personnel and other costs associated with the manufacturing operations of the Company. Cost of revenue also includes depreciation of production equipment, inventory write-downs, amortization of internally developed software, shipping and handling costs, and allocation of overhead and facility costs. The Company also includes credits for rebates received from foundries to cost of revenue.

### **Research and Development Expenses**

Research and development costs consist primarily of personnel cost, material cost, and facilities related expenses, incurred in the course of planned research and development of new products. Research and development costs are expensed as incurred.

## **Selling, General and Administrative Expenses**

Selling, general and administrative expenses primarily consist of personnel costs, field application engineering support, travel costs, professional and consulting fees, accounting and audit fees, legal, advertising expenses, and allocated overhead costs. Selling, general and administrative costs are expensed as incurred. Advertising expenses were \$0.3 million and \$0.2 million, for the years ended December 31, 2019 and 2018.

## **Stock-Based Compensation**

The Company measures and recognizes compensation expense for all stock-based awards made to employees, based on estimated fair values using the straight-line method over the requisite service period. The Company recognizes forfeitures as they occur.

### *Fair value of grants before IPO*

On July 20, 2016, certain employees of the Company were granted restricted stock units (“RSUs”), of MegaChips. These units were valued at the fair market price of MegaChips’ common stock on the date of the grant, which was equal to the price of MegaChips’ common stock on the Tokyo Stock Exchange on the grant date. The associated grants were all vested and settled as of June 15, 2018 and no further grants were made by MegaChips.

As part of the share based compensation agreement and due to the exercise restriction of 1 year at the time of vesting, the Company promised to advance cash to employees equal to the amount of payroll taxes that were due on vesting instead of issuing the employees restricted shares. The liability associated with the cash expense paid to the employee in lieu of restricted shares was treated as a liability-based award and was valued based on the estimate of the market price of the shares at each reporting date. Adjustments to the fair value of the liability are reported as compensation expense in the consolidated statements of operations and comprehensive income (loss).

### *Fair value of grants after IPO*

The Company granted RSUs of its own common stock after the completion of its IPO and such grants were valued at the fair market value of the Company’s stock on the date of the grant.

## **Net Income (Loss) Per Share Attributable to Common Stockholder**

Basic net income (loss) per share attributable to common stockholder is calculated by dividing the net income (loss) attributable to common stockholder by the weighted-average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net income (loss) per share is computed by dividing the net income (loss) attributable to common stockholder by the weighted-average number of shares of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net income (loss) per share calculation, the Company does not have any stock issuances that are considered to be potentially dilutive securities. As such, the net income (loss) was attributed entirely to common stockholder. Because the Company has no potentially dilutive securities for the years ended December 31, 2019 and 2018, diluted net income (loss) per share attributable to common stockholder is the same as basic net income (loss) per share attributable to common stockholder for all periods presented.

## **Comprehensive Income (Loss)**

The Company has no components of other comprehensive income (loss). Therefore, net income (loss) equals comprehensive income (loss) for all periods presented.

## 2. Recent Accounting Pronouncements

### Recently Adopted Accounting Guidance

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers*, creating ASC 606. Upon adoption, this topic supersedes the existing guidance under ASC Topic 605—Revenue Recognition and aims to simplify the number of requirements to follow for revenue recognition and make revenue recognition more comparable across various entities, industries, jurisdictions and capital markets. Revenue is recognized under a five-step process: (1) identify the contract(s) with a customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to performance obligations in the contract; and (5) recognize revenue when (or as) the entity satisfies a performance obligation. Additional considerations under this update include accounting for costs to obtain or fulfill a contract with a customer and additional quantitative and qualitative disclosures. ASU 2014-09 became effective for periods beginning after December 15, 2017 (including interim reporting periods within those periods), or the first quarter of 2018, and allows for retrospective or modified retrospective application. The Company adopted this guidance to all contracts in the first quarter of fiscal 2018 under the full retrospective approach. The Company believes the new guidance is materially consistent with its historical revenue recognition policy. In addition, ASU 2014-09 requires the presentation of sales returns reserve as a current liability and the cost of inventory associated with estimated returns as a current asset. The adoption had no impact on the consolidated statements of operations and comprehensive income (loss) for the year ended December 31, 2018 and also had no impact to net cash from or used in operating, investing, or financing activities in the Company's consolidated statements of cash flows.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 requires lessees to recognize all leases with a lease term in excess of one year on their balance sheet as a right of use asset and a liability at the commencement date. The Company adopted the new standard on January 1, 2019 using the optional adoption method and did not adjust comparative financial statements. The Company elected to use the short-term lease exemption whereby the right of use assets and lease liabilities do not need to be recognized for leases with a term of 12 months or less. The Company elected the package of transition provisions available for expired or existing contracts, which allowed the Company to carryforward the historical assessments of (1) whether contracts are or contain leases, (2) lease classification, and (3) initial direct costs. There was no impact on the Company's accumulated deficit as of January 1, 2019 as a result of the adoption of this standard. The consolidated financial statements for the year ended December 31, 2019 are presented under the new standard, while the comparative period presented and prior annual periods are not adjusted and continues to be reported in accordance with the Company's historical accounting policy. The adoption of the new lease standard resulted in the recognition of operating lease right-of-use assets of \$7.6 million and lease liabilities, including current obligations, of \$10.2 million as of January 1, 2019. In connection with the adoption of this standard, deferred rent of \$2.6 million, which was previously recorded in accrued and other current liabilities and in other long-term liabilities on the consolidated balance sheet as of December 31, 2018, was derecognized. See Note 5, "Leases," for more information.

### New Accounting Pronouncements Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. The new standard will be effective for fiscal years beginning after December 15, 2020. The Company is currently evaluating the impact of the adoption of this standard on its consolidated financial position, results of operations and cash flows.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use-software. The standard is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies the disclosure requirements in Topic 820. The new standard is effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. An entity is permitted to early adopt any removed or modified disclosures upon issuance of this ASU and delay adoption of the additional disclosures until their effective date. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which changes the credit loss model from an incurred loss approach to an expected loss approach. It requires the application of a current expected credit loss (“CECL”) impairment model to financial assets measured at amortized cost (including trade accounts receivable) and certain off-balance-sheet credit exposures. Under the CECL model, lifetime expected credit losses on such financial assets are measured and recognized at each reporting date based on historical, current, and forecasted information. The standard also changes the impairment model for available-for-sale debt securities, eliminating the concept of other than temporary impairment and requiring credit losses to be recorded through an allowance for credit losses. The amount of the allowance for credit losses for available-for-sale debt securities is limited to the amount by which fair value is below amortized cost. The standard is effective for interim and annual periods beginning after December 15, 2022. A modified retrospective adoption method is required, with a cumulative-effect adjustment to the opening retained earnings balance in the period of adoption. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial position, results of operations and cash flows.

### 3. Net Loss Per Share

The following table summarizes the computation of basic and diluted net income (loss) per share attributable to common stockholder of the Company:

	<u>Year Ended December 31</u>	
	<u>2019</u>	<u>2018</u>
	(in thousands, except per share data)	
Net loss attributable to common stockholder	\$ (6,607)	\$ (9,342)
Weighted-average shares outstanding	10,558	10,000
Weighted average shares used to compute basic and diluted net loss per share	10,558	10,000
Net loss attributable to common stockholders per share, basic and diluted	\$ (0.63)	\$ (0.93)

### 4. Balance Sheets Components

#### Inventory

Inventory consisted of the following:

	<u>As of</u>	
	<u>December 31, 2019</u>	<u>December 31, 2018</u>
	(in thousands)	
Raw materials	\$ 304	\$ 2,723
Work in progress	8,160	14,582
Finished goods	3,447	3,238
Total inventories	\$ 11,911	\$ 20,543

The Company acquired approximately \$8.0 million in inventory in anticipation of a product order from an end customer that did not materialize. As a result, the Company recorded an inventory write-down related to this inventory in first half of 2018 as there was no other active customer for the inventory at the time. The Company was subsequently able to sell approximately \$3.0 million of such inventory in the fourth quarter of 2018 and \$2.5 million in the year ended December 31, 2019 to the same customer.

### Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	As of	
	December 31, 2019	December 31, 2018
	(in thousands)	
Advance to suppliers	\$ 3,338	\$ 539
Prepaid expenses	1,279	668
Other current assets	984	2,849
Total prepaid and other current assets	<u>\$ 5,601</u>	<u>\$ 4,056</u>

### Property and Equipment, Net

Property and equipment, net consisted of the following:

	As of	
	December 31, 2019	December 31, 2018
	(in thousands)	
Lab Equipment	\$ 17,376	\$ 16,297
Computer Equipment	800	636
Furniture and fixtures	241	241
Construction in Progress	221	221
Leasehold improvements	4,074	4,013
	<u>22,712</u>	<u>21,408</u>
Accumulated depreciation	(13,424)	(10,127)
Total property and equipment, net	<u>\$ 9,288</u>	<u>\$ 11,281</u>

Depreciation expense related to property and equipment was \$3.3 million and \$3.5 million for the years ended December 31, 2019 and 2018, respectively.

### Intangible Assets, Net

Intangible assets, net consisted of the following:

	As of	
	December 31, 2019	December 31, 2018
	(in thousands)	
Internal use software	\$ 10,022	\$ 9,181
Purchased intangibles	4,793	4,355
	<u>14,815</u>	<u>13,536</u>
Accumulated amortization	(10,326)	(5,394)
Intangible assets, net	<u>\$ 4,489</u>	<u>\$ 8,142</u>

Amortization expense for intangible assets was \$4.9 million, and \$3.9 million, for the years ended December 31, 2019 and 2018, respectively.

As of December 31, 2019 and 2018, the Company had \$2.0 million and \$1.2 million, respectively, of intangibles that were still in development stage and were not being amortized. The estimated aggregate future amortization expense for intangible assets in development stage and subject to amortization as of December 31, 2019 is summarized as below:

	(in thousands)
2020	2,513
2021	920
2022	587
2023	469
2024 and beyond	—
	<u>4,489</u>

#### Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	As of	
	<u>December 31, 2019</u>	<u>December 31, 2018</u>
	(in thousands)	
Accrued payroll and related benefits	\$ 1,880	\$ 2,243
Accrued customer rebates	218	216
Accrued interest	72	520
Price adjustment and other revenue reserves	1,222	1,580
Short term lease liability	1,874	—
Other accrued expenses	3,176	3,096
Total accrued expenses and other current liabilities	<u>\$ 8,442</u>	<u>\$ 7,655</u>

#### 5. Leases

The Company leases real estate property under operating leases. The Company was also a lessee and a sublessor from an accounting perspective for its Santa Clara lease through March 31, 2019.

The Company signed a non-cancellable operating lease agreement for its corporate headquarters in Santa Clara, California, that commenced on October 20, 2016 and will expire on December 31, 2026. The agreement provides for an option to renew for an additional 5 years and for monthly rent payments through the term of the lease.

The Company also leases office space in Michigan, Malaysia, Japan, the Netherlands, and Ukraine all under non-cancellable operating leases with various expiration dates through May 2021. These leases are classified as operating leases. The remaining lease terms vary from few months to 7 years. For its leases the Company has options to extend the lease term for periods varying from one to five years. These renewal options are not considered in the remaining lease term unless it is reasonably certain that the Company will exercise such options. The Company also has variable lease payments that are primarily comprised of common area maintenance and utility charges.

In the year ended December 31, 2018, the Company signed an agreement to lease equipment of \$3.2 million for research and development and to help with the production of certain of its products, of which \$1.6 million was prepaid before the leased equipment was put in service in 2019. The lease term for such equipment is approximately 10 years. As of December 31, 2019, only \$0.8 million payments remain to be made for such equipment, which is recorded as short-term lease liability as of December 31, 2019 and paid by the Company in January 2020.

The table below presents the lease-related assets and liabilities recorded on the consolidated balance sheet under the new accounting guidance of ASC Topic 842 as of December 31, 2019:

	(in thousands)
Right-of-use assets	\$ 9,790
Lease liabilities included in accrued expenses and other current liabilities	1,874
Lease liabilities	7,940
Total operating lease liabilities	\$ 9,814
Weighted-average remaining lease term (years)	7.1
Weighted-average discount rate (1)	4.1%

(1) Upon adoption of the new lease standard, discount rates used for existing leases were established at January 1, 2019.

The table below presents certain information related to the lease costs for operating leases under the new accounting guidance of ASC Topic 842 for the year ended December 31, 2019:

	(in thousands)
Operating lease cost	\$ 1,419
Short-term lease cost	313
Variable lease cost	494
Total lease cost	\$ 2,226

Rent expense for the year ended December 31, 2018 was \$1.2 million under the previous accounting guidance of ASC Topic 840.

Cash paid for operating lease liabilities was \$3.9 million for the year ended December 31, 2019, which includes \$1.6 million of prepaid lease payments. The Company sub-leased a portion of its Santa Clara facility through March 31, 2019 and received \$0.3 million in sub-lease income for the year ended December 31, 2018 and \$0.1 million for the year ended December 31, 2019, which was included in the short-term lease cost above.

## Undiscounted Cash Flows

The table below reconciles the undiscounted cash flows for each of the first five years and total of the remaining years to the operating lease liabilities recorded on the consolidated balance sheet as of December 31, 2019:

	(in thousands)
2020	\$ 2,108
2021	1,409
2022	1,441
2023	1,489
2024	1,532
2025 and beyond	3,212
Total minimum lease payments	11,191
Less: amount of lease payments representing interest	(1,377)
Present value of future minimum lease payments	9,814
Less: current obligations under leases	(1,874)
Long-term lease liabilities	\$ 7,940

As of December 31, 2019, the Company did not have any leases that had not yet commenced.

As of December 31, 2018, the future minimum lease payments required under non-cancelable operating leases as defined under the previous accounting guidance of ASC Topic 840 were as follows:

	(in thousands)
2019	\$ 1,514
2020	1,485
2021	1,451
2022	1,485
2023	1,533
2024 and beyond	4,877
Total minimum lease payments	\$ 12,345

## 6. Commitments and Contingencies

### Purchase Commitments

The Company purchases components from a variety of suppliers and uses several contract manufacturers to provide manufacturing services for its products. During the normal course of business, in order to manage manufacturing lead times and to help ensure adequate component supply, the Company enters into agreements with the Company's contract manufacturers and suppliers that allow them to procure inventory based upon criteria as defined by the Company. A portion of the Company's reported purchase commitments arising from these agreements consists of firm, non-cancelable purchase commitments. In certain instances, these agreements allow the Company the option to cancel, reschedule, and adjust the Company's requirements based on its business needs prior to when production starts. However, in situations where the Company is unable to cancel, reschedule, or adjust the purchase commitment due to changing customer demand, excess inventories could result in material inventory provisions.

### ***Commitments for MEMS Wafer Supplier Agreement***

The Company purchases MEMS wafers required for its silicon timing systems products under a multi-year manufacturing agreement with a third-party supplier. Under this agreement, the Company has agreed to minimum quantity purchase commitments and is responsible for research and development, tooling, and samples cost, in addition to wafer costs. The Company has historically met the supplier's minimum wafer quantity requirements. The remaining tooling cost commitment under the agreement as of December 31, 2019 was \$0.8 million and paid in 2020.

### **Indemnification**

The Company is a party to a variety of agreements pursuant to which it may be obligated to indemnify other parties to such agreements with respect to certain matters. Typically, these obligations arise in the context of contracts that the Company has entered into, under which the Company customarily agrees to hold the other party harmless against losses arising from a breach of representations and covenants or terms and conditions related to such matters as the sale and/or delivery of its products, title to assets sold, certain intellectual property claims, defective products, specified environmental matters, and certain income taxes. Further, the Company's obligations under these agreements may be limited in terms of time, amount, or the scope of its responsibility and in some instances, the Company may have recourse against third parties for certain payments made under these agreements. It is not possible to predict the maximum potential amount of future payments under these agreements due to the conditional nature of the Company's obligations and the unique facts and circumstances involved in each particular agreement. Historically, the Company has had no indemnification claims under these agreements.

### **Legal Matters**

From time to time, the Company may be a party to various litigation claims in the normal course of business. Legal fees and other costs associated with such actions are expensed as incurred. The Company assesses, in conjunction with legal counsel, the need to record a liability for litigation and contingencies. Accrual estimates are recorded when and if it is determined that such a liability for litigation and contingencies are both probable and reasonably estimable. As of the date of issuance of the financial statements, the Company was not subject to any litigation. No accruals for loss contingencies or recognition of actual losses have been recorded in any of the periods presented.

In March 2019, VTT Technical Research Centre of Finland, Ltd. filed suit in the United States District Court for the Northern District of California alleging infringement by the Company of a patent relating to a specific combination of features set forth in the asserted patent. The complaint seeks unspecified monetary damages and injunctive relief. On January 22, 2020, the Company participated in a mediation that had been ordered by the Court. The case was not resolved at the mediation, and the proceedings will continue according to the current case management schedule. The Company has not accrued for a loss contingency relating to such matter as the loss is currently not probable and reasonably estimable.

### **7. Debt Obligations**

The Company has borrowed against the short-term revolving lines of credit that it has arranged with financial institutions like The Bank of Tokyo-Mitsubishi UFJ, Ltd. ("MUFG"), and Sumitomo Mitsui Banking Corporation ("SMBC"), and MegaChips to fund its operations. The weighted-average interest rate on short-term borrowings outstanding as of December 31, 2019 and 2018 was 1.42% and 3.69%, respectively.

Debt obligations as of December 31, 2019 and 2018 consisted of the following:

	As of	
	December 31, 2019	December 31, 2018
	(in thousands)	
Revolving line of credit:		
MUFG	\$ 41,000	\$ 41,000
SMBC	—	2,000
MegaChips loan	—	3,000
Balance	41,000	46,000
Less: Current portion of long-term debt	(41,000)	(46,000)
Long-term debt	\$ —	\$ —

As of December 31, 2019, debt obligations were as follows (dollars in thousands):

Lender	Loan Start Date	Loan Amount	Annual Interest Rate	Maturity Date
MUFG	12/19/2019	\$ 38,000	2.97000%	6/10/2020
MUFG	8/23/2019	3,000	3.10000%	2/19/2020
		<u>\$ 41,000</u>		

As of December 31, 2018, debt obligations were as follows (dollars in thousands):

Lender	Loan Start Date	Loan Amount	Annual Interest Rate	Maturity Date
MUFG	6/29/2018	\$ 20,000	3.72000%	6/28/2019
MUFG	8/23/2018	3,000	3.77000%	8/23/2019
MUFG	9/24/2018	8,000	3.87000%	9/24/2019
MUFG	12/19/2018	10,000	4.07000%	12/19/2019
SMBC	12/19/2018	2,000	4.96500%	12/19/2019
MegaChips	10/1/2018	3,000	3.20838%	12/31/2018
		<u>\$ 46,000</u>		

## Revolving Line of Credit

### *The Bank of Tokyo-Mitsubishi Credit Facility*

On August 31, 2015, the Company entered into a bank transaction agreement with MUFG. The agreement provided for a revolving line of credit with a maximum available borrowing of \$20.0 million. The original maturity date of the revolving line of credit was June 30, 2017, which was renewed for an additional one year term. On June 29, 2018, the Company renewed its agreement with MUFG with a new maturity date of June 28, 2019 and also increased the revolving line of credit to \$50.0 million. On December 19, 2018, the Company borrowed an additional \$10.0 million loan under the credit line with MUFG which was extended through June 20, 2020. On June 27, 2019, the maturity of the \$20.0 million loan was extended through December 31, 2019. On June 28, 2019, the Company renewed its agreement with MUFG with a new term through June 30, 2020. On August 23, 2019, the Company's \$3.0 million loan under the credit line with MUFG was extended through February 19, 2020. Such loan was repaid upon maturity in February 2020. On September 24, 2019, the Company's \$8.0 million loan under the credit line with MUFG was extended through December 19, 2019. On December 19, 2019, the Company combined and extended its \$20.0 million loan, \$10.0 million loan, and \$8.0 million loan to June 10, 2020. Interest under the revolving line of credit is calculated at MUFG's prevailing prime rate plus a margin of 2 percentage points which would be agreed by the Company at the time each loan was made. The interest rates on these loans vary depending on the date and term of each loan. Interest is due for payment on the maturity date of each loan. The Company did not incur any costs upon renewal of the revolving credit line or at the time of increase in the revolving line of credit.

The agreement contains customary representations and warranties, affirmative covenants, and events of default upon the occurrence of certain events, such as nonpayment of amounts due under the revolving line of credit, violation of contractual provisions, or a material adverse change in the Company's business. The agreement also includes customary administrative covenants, including a limitation on entering any transactions involving a merger or consolidation, reorganization, spin-off, liquidation, dissolution, winding up, or conveying, selling, leasing, licensing, or otherwise disposing of all or substantially all of the Company's property, assets, or business. As of December 31, 2019 and 2018, the Company was in compliance with all covenants. The agreement provides that the Company will provide collateral if MUFG determines in consultation with the Company that additional collateral or guarantee would be necessary. The MUFG revolving line of credit is guaranteed by MegaChips.

As of December 31, 2019 and 2018, the aggregate principal amount outstanding under the revolving credit line with MUFG was \$41.0 million and remaining available credit line was \$9.0 million as of December 31, 2019.

#### ***Sumitomo Mitsui Banking Corporation Credit Facility***

On September 22, 2017, the Company entered into an uncommitted and revolving credit line agreement with SMBC. The revolving credit line has a maximum available borrowing availability of up to \$20.0 million. The Company could draw loans under the revolving credit line from time to time through September 21, 2018, as long as the principal amount at any time did not exceed \$20.0 million in the aggregate. Such term was extended for an additional year through September 20, 2019 and further extended for an additional year through September 21, 2020. Loans under the revolving credit line may have a maturity from one day to 12 months from the date of borrowing. The loans borrowed under the revolving line of credit bear a variable rate of interest based upon SMBC's prevailing prime rate plus a margin of 1 percentage point which would be agreed by the Company at the time each loan is made. Interest is due for payment on the maturity date of each loan. SMBC has the right to terminate the revolving credit line in whole or part in its sole discretion. The Company did not incur any costs at the initiation of the revolving line of credit or upon renewal of the revolving credit line.

The agreement contains customary representations and warranties, affirmative covenants, negative covenants, and events of default upon the occurrence of certain events, such as nonpayment of amounts due under the revolving line of credit, violation of contractual provisions, or a material adverse change in the Company's business. In addition, the agreement includes a financial covenant for a minimum net worth, defined as total assets less total liabilities, of \$0. The agreement also includes customary administrative covenants, including a limitation on entering any transactions involving a merger or consolidation, reorganization, spin-off, liquidation, dissolution, winding up, or conveying, selling, leasing, licensing, or otherwise disposing of all or substantially all of the Company's property, assets, or business. As of December 31, 2019 and 2018, the Company was in compliance with all covenants. The agreement provides that the Company will provide collateral if SMBC determines in consultation with the Company that additional collateral or guarantee would be necessary. Use of proceeds from the loan is restricted for certain specified purposes. The SMBC revolving line of credit is also guaranteed by MegaChips.

As of December 31, 2019 and 2018, the aggregate principal amount outstanding under the revolving credit line with SMBC was \$0 and \$2.0 million, respectively, and remaining available credit was \$20.0 million as of December 31, 2019. The outstanding balance under the revolving line with SMBC was repaid on December 19, 2019 upon maturity.

#### **MegaChips Loan**

On September 13, 2016, the Company entered into a loan agreement with MegaChips for a revolving credit limit of up to \$30.0 million (the "MegaChips Loan Agreement"). Loans under the MegaChips Loan Agreement bear interest at a rate equal to the interest rate at which MegaChips procured the funds from SMBC, plus 0.09%. Interest for each loan is due on the maturity date of each loan. Each loan drawn from MegaChips has a three-month term, which term was renewed on maturity. MegaChips has discretion whether to accept the Company's request for a loan under the MegaChips Loan Agreement. The initial term of the MegaChips Loan Agreement is one year from the date of the agreement, which term is automatically renewed and extended every year unless either party provides written notice to the other party. The Company did not incur any costs at the time of initiation of such credit facility or at the time of extension of the term of the credit facility.

The agreement contains usual and customary events of default upon the occurrence of certain events, such as nonpayment of amounts due under the revolving line of credit, violation of contractual provisions, a material adverse impact on the Company's business, or its ability to perform under the agreement. The agreement includes customary administrative covenants but does not contain any negative covenants or conditions to borrowing. As of December 31, 2019 and 2018, the Company was in compliance with all covenants.

As of December 31, 2019 and 2018, the aggregate principal amount outstanding under the credit facility with MegaChips was \$0 million and \$3.0 million, respectively, and remaining available credit was \$30.0 million as of December 31, 2019. The outstanding balance under the revolving line with MegaChips was repaid on December 12, 2019 upon maturity.

## **8. Stockholders' Equity**

The Company's certificate of incorporation, as amended and currently in effect, authorizes the Company to issue 200,000,000 shares of common stock, par value \$0.0001 per share. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when and if declared by the board of directors, subject to the prior rights of holders of all classes of preferred stock outstanding. The Company has never declared any dividends.

## **9. Stock-based Compensation**

### **SiTime Corporation 2019 Stock Incentive Plan**

Upon completion of its IPO in November 2019, the Company adopted the SiTime Corporation 2019 Stock Incentive Plan (the "2019 Plan"), which initially reserved approximately 3.4 million shares of the Company's common stock. The 2019 Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance stock awards, and other forms of equity compensation (collectively, "stock awards"), and cash awards, all of which may be granted to employees (including officers), directors, and consultants or affiliates. Awards granted under the 2019 Plan vest at the rate specified by the plan administrator, for restricted stock unit awards typically with quarterly vesting over four years. As of December 31, 2019, 0.3 million shares were still reserved for issuance

MegaChips, the parent of the Company at the time, had also established a one-time Restricted Stock Unit Plan, which was adopted by MegaChips' board of directors in May 2016. Under the Plan, certain employees of the Company were granted RSUs of MegaChips. MegaChips' common stock is traded on the Tokyo Stock Exchange. The total number of shares authorized for grant under the Plan was 339,911. All units authorized to be granted under the Plan were granted to employees on July 20, 2016, the grant date. The units granted had a quarterly vesting schedule of two years. These units were valued at the fair market price of MegaChips' common stock on the grant date, which was equivalent to approximately \$11.89, based on the price of MegaChips' common stock on the Tokyo Stock Exchange. The Company records a liability associated with the cash expense paid to the employee in lieu of restricted shares granted as part of the Plan and due to the exercise restriction of 1 year at the time of vesting. These cash advances were paid by MegaChips and accordingly, are shown as investment from MegaChips in the statement of stockholders' equity. Adjustments to the fair value of the liability are reported as compensation expense in the consolidated statements of operations and comprehensive income (loss). The associated grants were all vested and settled as of June 15, 2018 and no further grants were made by MegaChips.

Total stock-based compensation expense for employees recognized in the consolidated statements of operations and comprehensive income (loss) was as follows:

	<u>Year Ended December 31,</u>	
	<u>2019</u>	<u>2018</u>
(in thousands)		
<b>Equity awards</b>		
Cost of revenue	\$ 36	\$ 19
Research and development	346	526
Selling, general and administrative	997	286
	<u>\$ 1,379</u>	<u>\$ 831</u>
<b>Liability based awards</b>		
Cost of revenue	\$ —	\$ 39
Research and development	—	1,062
Selling, general and administrative	—	599
	<u>\$ —</u>	<u>\$ 1,700</u>
<b>Total stock-based compensation expense</b>	<u>\$ 1,379</u>	<u>\$ 2,531</u>

The Company granted 3.0 million new time-based restricted stock awards in the year ended December 31, 2019 with quarterly vests primarily over two to five years. At December 31, 2019, there was \$37.8 million unamortized compensation expense related to unvested stock awards. The unamortized compensation cost is expected to be recognized over a weighted average period of 4.40 years. Activity of RSUs granted under the Plan is set forth below:

	<u>Shares</u>	<u>Grant Date</u>
	<u>Outstanding</u>	<u>Fair Value</u> <u>per share</u>
<b>Balance at December 31, 2017</b>	77,619	11.89
Granted	—	—
Vested	(76,296)	11.89
Forfeited	(1,323)	11.89
<b>Balance at December 31, 2018</b>	<u>—</u>	<u>—</u>
Granted	3,012,399	13.00
Vested	(23,077)	13.00
Forfeited	—	—
<b>Balance at December 31, 2019</b>	<u>2,989,322</u>	<u>13.00</u>

## 10. Income Taxes

The components of loss before income taxes were as follows:

	<u>Years Ended December 31,</u>	
	<u>2019</u>	<u>2018</u>
(in thousands)		
United States	\$ (6,485)	\$ (9,205)
Foreign	(130)	(163)
	<u>\$ (6,615)</u>	<u>\$ (9,368)</u>

The components of income tax benefit were as follows:

	Years Ended December 31,	
	2019	2018
	(in thousands)	
United States	\$ 8	\$ 26
Foreign	—	—
	<u>\$ 8</u>	<u>\$ 26</u>

The material components of the deferred tax assets and liabilities consisted of net operating loss carry-forwards and tax credit carry-forwards.

	Years Ended December 31,	
	2019	2018
	(in thousands)	
Deferred tax assets:		
Accrual, write-down and other	\$ 2,469	\$ 2,931
Depreciation and amortization	76	(2,245)
Net operating loss and credits carry forwards	42,949	44,810
Total gross deferred tax assets	45,494	45,496
Valuation allowance	(45,494)	(45,496)
Total net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

The net valuation allowance decreased by less than \$0.1 million for the year ended December 31, 2019.

A reconciliation of the Company's effective tax rate to the statutory U.S. federal rate is as follows:

	Years Ended December 31,	
	2019	2018
	(in thousands)	
US Federal Rate	21.0%	21.0%
R&D Credits	(10.9)	9.4
Permanent differences and others	(18.3)	4.2
Change in valuation allowance	8.2	(34.3)
	<u>0.0%</u>	<u>0.3%</u>

The reported amount of income tax expense differs from an expected amount based on statutory rates primarily due to the Company's valuation allowance.

As of December 31, 2019 and 2018, based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be realized. Accordingly, management has applied a full valuation allowance against its net deferred tax assets at December 31, 2019 and 2018.

At December 31, 2019 and 2018, the Company has federal net operating loss carry-forwards of approximately \$156.5 million and \$160.7 million, respectively, and state net operating loss carry-forwards of approximately \$63.7 million and \$63.9 million, respectively. At December 31, 2019 the Company has net operating loss carryforwards for foreign income tax purposes of approximately \$1.3 million. The Company did not have any net operating loss carryforwards for foreign income tax purposes at December 31, 2018. These federal, state, and foreign net operating loss carry-forwards will expire beginning in 2025, 2028, and 2028, respectively. At December 31, 2019 and 2018, the Company also has federal research and development tax credit carry-forwards of approximately \$3.9 million and \$4.6 million, respectively, and state research and development tax credit carry-forwards of approximately \$3.6 million and \$4.1 million, respectively. The federal tax credits begin to expire in 2025, and the California tax credits carry forward indefinitely.

Utilization of the net operating loss carry-forwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended (“the Code”), and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

As of December 31, 2019 and 2018, the Company had \$2.2 million and \$2.2 million of total unrecognized tax benefits. The Company currently has a full valuation allowance against its net deferred tax assets which would impact the timing of the effective tax rate benefit should any of these uncertain tax positions be favorably settled in the future. If the Company is able to eventually recognize these uncertain tax positions, none of the unrecognized benefit would reduce the Company’s effective tax rate due to full valuation allowance of the Company’s deferred tax assets. The Company’s policy is to record interest and penalties related to unrecognized tax benefits as income tax expense. During the years ended December 31, 2019 and 2018, the Company had immaterial amounts related to the accrual of interest and penalties.

A reconciliation of the beginning and ending unrecognized tax benefit amount is as follows:

	December 31,	
	2019	2018
	(in thousands)	
Beginning balance	\$ 2,198	\$ 1,901
Decrease in balance related to tax position taken during prior periods	(14)	—
Increase in balance related to tax position taken during the current period	—	297
Ending balance	<u>\$ 2,184</u>	<u>\$ 2,198</u>

The Company does not have any tax positions for which it is reasonably possible the total amount of gross unrecognized tax benefits will increase or decrease within 12 months of the years ended December 31, 2019 and 2018.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal, state, local, and foreign jurisdictions, where applicable. Due to the Company’s net losses, its federal, state and local, and foreign tax returns since inception are subject to audit.

As of December 31, 2019, the tax years that remain subject to examination by the major tax jurisdictions under the statute of limitations are as follows:

Jurisdiction	Earliest Tax Year Subject to Examination
U.S. federal	2005
California State	2008

#### 11. 401(k) Plan

The Company has a 401(k) retirement plan that qualifies as a defined contribution plan. All employees are eligible to participate on the first day of the month following their hire date with the Company. Under the defined contribution plan, employees may contribute the lesser of 90% of their pre-tax salaries per year or the maximum contribution allowed under the Code. The Company may make discretionary matching contributions, if deferral contributions are made by the employees. The Company’s matching contributions for the years ended December 31, 2019 and 2018 resulted in expense of \$0.6 million in each year.

## 12. Segment Information and Operations by Geographic Area

The Company operates in one reportable segment related to the design, development, and sale of silicon timing systems solutions. The chief operating decision maker, for the Company is the Chief Executive Officer. The Company's Chief Executive Officer reviews operating results on an aggregate basis and manages the Company's operations as a whole for the purpose of evaluating financial performance and allocating resources. Accordingly, the Company has determined that it has a single reportable and operating segment structure.

The following table sets forth revenue by country, based on ship-to destinations, for countries with 10% or more of the Company's revenue during any of the periods presented:

	Year Ended	
	December 31, 2019	December 31, 2018
	(in thousands)	
Taiwan	\$ 39,060	\$ 45,107
Hong Kong	16,534	16,204
United States	5,677	6,061
Other	22,803	17,842
Total	<u>\$ 84,074</u>	<u>\$ 85,214</u>

The Company's long-lived assets in the U.S. attributable to operations as of December 31, 2019 and 2018 were 97% of total property and equipment and intangible assets.

## 13. Related Party Transactions

The Company entered into a distribution agreement with MegaChips, whereby the Company appointed MegaChips as the exclusive distributor of its products in Japan. The Company sells products through MegaChips to distributors, resellers, or direct customers in Japan. The Company pays MegaChips a fixed percentage of the revenue as sales commission, which is recorded as commission expense and included in sales and marketing in the consolidated statements of operations and comprehensive income (loss).

See Note 7, "Debt Obligations" for more information regarding the Company's loan agreement with MegaChips.

The following is a summary of significant balances, transactions and payments with the related parties.

	December 31, 2019	December 31, 2018
	(in thousands)	
<b>MegaChips</b>		
Accounts receivable	\$ 1,073	\$ 1,436
Prepaid expenses and other current assets	18	—
Accounts payable	220	194
Loan from MegaChips	—	3,000
	Year ended December 31,	
	2019	2018
	(in thousands)	
<b>MegaChips</b>		
Sales through distribution agreement	\$ 5,071	\$ 5,810
License expense	158	—
Commission expense	202	368
Interest expense	94	95

	Year Ended December 31,	
	2019	2018
	(in thousands)	
<b>MegaChips</b>		
Cash paid for principal	\$ 3,000	\$ —
Cash paid for interest	94	95
Cash paid for commissions	202	368
Cash paid for licenses	329	—

#### 14. Subsequent Events

On February 19, 2020, the Company repaid its outstanding loan of \$3.0 million with MUFG upon maturity.

UNAUDITED QUARTERLY FINANCIAL DATA

**Fiscal Year 2019**

	Three Months Ended			
	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands except per share data)			
Revenue	\$ 28,089	\$ 25,325	\$ 15,843	\$ 14,817
Gross profit	13,448	12,147	6,374	7,589
Total operating expenses	12,418	10,647	11,355	10,011
Income (loss) from operations	1,030	1,500	(4,981)	(2,422)
Net income (loss)	633	1,079	(5,449)	(2,870)
Net income (loss) per share basic and diluted	0.05	0.11	(0.54)	(0.29)

**Fiscal Year 2018**

	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018
		(in thousands except per share data)		
Revenue	\$ 22,851	\$ 21,694	\$ 14,911	\$ 25,758
Gross profit	13,751	10,662	6,995	4,797
Total operating expenses	11,661	9,915	10,974	11,445
Income (loss) from operations	2,090	747	(3,979)	(6,648)
Net income (loss)	1,650	296	(4,319)	(6,969)
Net income (loss) per share basic and diluted	0.17	0.03	(0.43)	(0.70)

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

None

**Item 9A. Controls and Procedures.***Evaluation of Disclosure Controls and Procedures.*

We maintain “disclosure controls and procedures,” as such term is defined in Rules 13a-15 (e) and 15d – 15(e) under the Exchange Act, that are designed to provide reasonable assurance that information required to be disclosed by us 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 Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), as appropriate, to allow for timely decisions regarding required disclosure.

Based on their evaluation as of the end of the period covered by this Annual Report on Form 10-K, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

*Management’s Annual Report on Internal Control over Financial Reporting; Attestation Report of the Registered Public Accounting Firm.*

This Annual Report on Form 10-K does not include a report of management’s assessment regarding internal control over financial reporting or an attestation report of the company’s registered public accounting firm due to a transition period established by rules and regulations of the SEC for newly public companies.

Further, our independent registered public accounting firm will not be required to formally attest to the effectiveness of our internal controls over financial reporting as long as we are an “emerging growth company” pursuant to the provisions of the JOBS Act.

*Changes in Internal Control over Financial Reporting*

No changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2019 that have materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

*Inherent Limitations on Effectiveness of Controls*

Our management, including our principal executive and chief executive officer, does not expect that our disclosure controls and procedures or our internal controls, will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, 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. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within SiTime have been detected.

**Item 9B. Other Information.**

None

## PART III

### **Item 10. Directors, Executive Officers and Corporate Governance.**

The information required by this item will be set forth under the captions “Election of Directors – Directors and Nominees” and “Election of Directors – Executive Officers, Directors and Director Nominees” in our definitive proxy statement to be filed with the SEC, in connection with our 2020 annual meeting of stockholders (the “Proxy Statement”), which is expected to be filed not later than 120 days after the end of our fiscal year ended December 31, 2019, and is incorporated in this report by reference. Certain information required by this item concerning executive officers is set forth in Part I of this report under the caption “Executive Officers of the Registrant” and is incorporated herein by reference.

Item 405 of Regulation S-K calls for disclosure of any known late filing or failure by an insider to file a report required by Section 16(a) of the Exchange Act. To the extent disclosure for delinquent reports is being made, it can be found under the section entitled “Delinquent Section 16(a) Reports” in the Proxy Statement and is incorporated herein by reference.

We have adopted a Code of Business Conduct and Ethics that applies to all of our officers and employees, including our chief executive officer, chief financial officer, corporate controller, and other employees who perform financial or accounting functions. The Code of Business Conduct and Ethics sets forth the basic principles that guide the business conduct of our employees and is available on our website at [www.sitime.com](http://www.sitime.com). We have also adopted a Code of Ethics for Senior Financial Officers that specifically applies to our chief executive officer (our principal executive officer) and chief financial officer (our principal financial officer and principal accounting officer). Stockholders may request a free copy of our Code of Ethics for Senior Financial Officers by contacting us at SiTime Corporation, Attention: Investor Relations, 5451 Patrick Henry Drive, Santa Clara, California 95054.

To date, there have been no waivers under our Code of Business Conduct and Ethics or Code of Ethics for Senior Financial Officers. We will disclose on our website amendments to, or waivers from, our Code of Ethics for Senior Financial Officers, in accordance with applicable laws and regulations.

We have a separately designated standing audit committee of our board of directors (the “Audit Committee”) established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are Raman K. Chitkara, Edward H. Frank, and Torsten G. Kreindl. All of such members meet the independence standards established by the Nasdaq listing rules for serving on an audit committee. SEC regulations require us to disclose whether a director qualifying as an “audit committee financial expert” serves on our Audit Committee. Our board of directors has determined that Mr. Chitkara qualifies as an “audit committee financial expert” within the meaning of such regulations.

### **Item 11. Executive Compensation.**

The information required by this item will be set forth under the captions “Executive Compensation”, “Corporate Governance — Compensation Committee Interlocks and Insider Participation” and “Corporate Governance – Non-Employee Director Compensation” in the Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth under the caption “Security Ownership of Certain Beneficial Owners and Management” and “Executive Compensation – Equity Compensation Plan Information” in the Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth under the captions “Certain Relationships and Related Person Transactions” and “Corporate Governance — Director Independence” in the Proxy Statement and is incorporated herein by reference.

**Item 14. Principal Accounting Fees and Services.**

The information required by this item will be set forth under the caption “Ratification of the Appointment of Independent Registered Public Accountants — Principal Accounting Fees and Services” in the Proxy and is incorporated herein by reference.

PART IV

**Item 15. Exhibits, Financial Statement Schedules.**

(a) The following documents are filed as a part of this Annual Report on Form 10-K:

1. Financial Statements:

[Consolidated Balance Sheets as of December 31, 2019 and 2018](#)

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[Consolidated Statements of Operations for the years ended December 31, 2019 and 2018](#)

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Consolidated Statements of Comprehensive Income (Loss)

[Consolidated Statements of Stockholders' Equity](#)

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[Consolidated Statements of Cash Flows](#)

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[Notes to Consolidated Financial Statements](#)

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2. Financial Statement Schedule (Valuation and Qualifying Accounts) for the years ended December 31, 2019 and 2018:

[Schedule II—Valuation and Qualifying Accounts](#)

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3. Exhibits:

The documents listed below are filed (or furnished, as noted) as exhibits to this Annual Report on Form 10-K:

## Exhibit Index

Exhibit Number	Description
3.1	<a href="#"><u>Restated Certificate of Incorporation of SiTime Corporate (the “Company”)(incorporated by reference to Exhibit 3.1 to the Company’s Current Report on Form 8-K filed November 26, 2019).</u></a>
3.2	<a href="#"><u>Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 32 to the Company’s Current Report on Form 8-K filed November 26, 2019).</u></a>
4.1	<a href="#"><u>Form of Common Stock Certificate of the Company ((incorporated by reference to Exhibit 4.1 to the Company’s Registration Statement on Form S-1 (File No. 333-234305) (the “S-1”)).</u></a>
4.2†	<a href="#"><u>Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.</u></a>
10.1+	<a href="#"><u>Form of Indemnification Agreement between the Company and its directors and officers (incorporated by reference to Exhibit 10.1 to the S-1).</u></a>
10.2+	<a href="#"><u>2019 Stock Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise, Stock Option Grant Notice, Restricted Stock Unit Agreement, and Restricted Stock Agreement thereunder (incorporated by reference to Exhibit 10.2 to the S-1).</u></a>
10.3+	<a href="#"><u>New Terms of Employment, dated October 21, 2014, between Rajesh Vashist and the Company (incorporated by reference to Exhibit 10.3 to the S-1).</u></a>
10.4+	<a href="#"><u>Amendment to Terms of Employment Letter, dated June 14, 2016, between Rajesh Vashist and the Company (incorporated by reference to Exhibit 10.4 to the S-1).</u></a>
10.5+	<a href="#"><u>Offer of Employment, dated September 24, 2019, between Arthur D. Chadwick and the Company (incorporated by reference to Exhibit 10.5 to the S-1).</u></a>
10.6+	<a href="#"><u>Offer of Employment, dated January 27, 2018, between Lionel Bonnot and the Company (incorporated by reference to Exhibit 10.6 to the S-1).</u></a>
10.7+	<a href="#"><u>New Terms of Employment, dated October 20, 2014, between Piyush B. Sevalia and the Company (incorporated by reference to Exhibit 10.7 to the S-1).</u></a>
10.8+	<a href="#"><u>Change of Control and Severance Agreement, between the Company and Rajesh Vashist (incorporated by reference to Exhibit 10.8 to the S-1).</u></a>
10.9+	<a href="#"><u>Form of Change of Control and Severance Agreement, between the Company and its Executives (incorporated by reference to Exhibit 10.9 to the S-1).</u></a>
10.10+	<a href="#"><u>MegaChips Corporation Restricted Stock Unit Plan, effective May 13, 2016 (incorporated by reference to Exhibit 10.10 to the S-1).</u></a>
10.11+	<a href="#"><u>Form of Restricted Stock Unit Agreement, among MegaChips Corporation, the Company and the participant (incorporated by reference to Exhibit 10.11 to the S-1).</u></a>
10.12	<a href="#"><u>Bank Transaction Agreement, dated August 31, 2015, between the Company and The Bank of Tokyo-Mitsubishi UFJ, Ltd (incorporated by reference to Exhibit 10.12 to the S-1).</u></a>
10.13	<a href="#"><u>Uncommitted and Revolving Credit Line Agreement, dated September 21, 2018, between the Company and Sumitomo Mitsui Banking Corporation (incorporated by reference to Exhibit 10.13 to the S-1).</u></a>
10.14	<a href="#"><u>Loan Agreement, dated September 13, 2016, between the Company and MegaChips Corporation (incorporated by reference to Exhibit 10.14 to the S-1).</u></a>

10.15	<a href="#"><u>Distribution Agreement, dated April 1, 2015, between the Company and MegaChips Corporation, and related Memorandums of Understanding dated April 1, 2015 and January 1, 2019 (incorporated by reference to Exhibit 10.15 to the S-1).</u></a>
10.16	<a href="#"><u>Integration and Purchase Agreement, dated March 15, 2019, between the Company and MegaChips Corporation (incorporated by reference to Exhibit 10.16 to the S-1).</u></a>
10.17	<a href="#"><u>Lease, dated April 15, 2016, between the Company and Batton Associates, LLC (incorporated by reference to Exhibit 10.17 to the S-1).</u></a>
10.18*	<a href="#"><u>License Agreement, dated August 1, 2018, between the Company and Robert Bosch LLC (incorporated by reference to Exhibit 10.18 to the S-1).</u></a>
10.19*	<a href="#"><u>Amended and Restated Manufacturing Agreement, dated February 23, 2017, between the Company and Robert Bosch LLC (incorporated by reference to Exhibit 10.19 to the S-1).</u></a>
10.20*	<a href="#"><u>Amendment No. 1 to Amended and Restated Manufacturing Agreement, dated August 1, 2018, between the Company and Robert Bosch LLC (incorporated by reference to Exhibit 10.20 to the S-1).</u></a>
10.21	<a href="#"><u>Guaranty, dated June 29, 2018, by the Company and MegaChips Corporation (incorporated by reference to Exhibit 10.21 to the S-1).</u></a>
10.22	<a href="#"><u>Guaranty, dated June 28, 2019, by MegaChips Corporation (incorporated by reference to Exhibit 10.22 to the S-1).</u></a>
21.1†	<a href="#"><u>Subsidiaries of the Company.</u></a>
23.1†	<a href="#"><u>Consent of BDO USA, LLP, an Independent Registered Public Accounting Firm.</u></a>
24.1	<a href="#"><u>Power of Attorney (see signature page hereto).</u></a>
31.1†	<a href="#"><u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u></a>
31.2†	<a href="#"><u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u></a>
32.1#	<a href="#"><u>Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u></a>
32.2#	<a href="#"><u>Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u></a>
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

† Filed herewith.

+ Indicates management contract or compensatory plan.

\* Portions of this exhibit have been omitted in accordance with Item 601 of Regulation S-K.

# In accordance with Item 601(b)(32)(ii) of Regulation S-K and SEC Release No. 34-47986, the certifications furnished in Exhibits 32.1 and 32.2 hereto are deemed to accompany this Form 10-K and will not be deemed “filed” for purposes of Section 18 of the Exchange Act or deemed to be incorporated by reference into any filing under the Exchange Act or the Securities Act of 1933 except to the extent that the Company specifically incorporates it by reference.

**Item 16. 10-K Summary.**

None

**SCHEDULE II**  
**VALUATION AND QUALIFYING ACCOUNTS**

	Valuation and Qualifying Accounts			Balance at End of Period
	Balance at Beginning of Period	Additions Charged to Expenses or Other Accounts	Deductions Credited to Expenses or Other Accounts	
	(in thousands)			
<b>Allowance for doubtful accounts receivable</b>				
Year Ended December 31, 2019	\$ 168	\$ —	\$ (39)	\$ 129
Year Ended December 31, 2018	\$ 125	\$ 43	\$ —	\$ 168
<b>Deferred tax valuation allowance</b>				
Year Ended December 31, 2019	\$ 45,496	\$ (2)	\$ —	\$ 45,494
Year Ended December 31, 2018	\$ 42,308	\$ 3,188	\$ —	\$ 45,496



**SITIME CORPORATION**  
**DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO**  
**SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

SiTime Corporation, a Delaware corporation (“we”, “us,” or “our”), has one class of securities registered pursuant to Section 12 of the Securities Exchange Act of 1934: our common stock, \$0.0001 par value per share. The general terms and provisions of our common stock are summarized below. This summary does not purport to be complete and is qualified in its entirety by reference to our amended and restated certificate of incorporation and our and amended and restated bylaws, each of which has been filed as an exhibit to our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”), as may be amended by a document filed with one of our periodic reports filed with the SEC subsequent to the date of that Annual Report.

**Common Stock**

We are authorized to issue 200,000,000 shares of common stock. Each holder of common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. We have not provided for cumulative voting for the election of directors in our amended and restated certificate of incorporation. This means that the holders of a majority of the shares voted can elect all of the directors then standing for election. Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of assets legally available at the times and in the amounts that our board of directors may determine from time to time. Upon our liquidation, dissolution, or winding-up, holders of common stock are entitled to share ratably in all assets remaining after payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock. Holders of our common stock have no preemptive, conversion, or other subscription rights. There are no redemption or sinking fund provisions applicable to our common stock. All outstanding shares of common stock are fully paid and nonassessable.

**Preferred Stock**

We are authorized to issue up to 10,000,000 shares of preferred stock, which can be issued in one or more series, with such rights, preferences, and privileges as determined by our board of directors with respect to each series.

**Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws**

Certain provisions of Delaware law, our amended and restated certificate of incorporation, and our and amended and restated bylaws could have the effect of delaying, deferring, or discouraging another party from acquiring control of us.

*Certificate of Incorporation and Bylaws.* Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- authorize our board of directors to issue, without further action by the stockholders, 10,000,000 shares of undesignated preferred stock with terms, rights, and preferences determined by our board of directors that may be senior to our common stock, which preferred stock could decrease the amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and powers, including voting rights, of the holders of our common stock;
  - require that any action to be taken by our stockholders be effected at a duly called annual or special meeting and not by written consent;
  - specify that special meetings of our stockholders can be called only by our board of directors, the Chairman of our board of directors, or our chief executive officer;
  - establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our board of directors;
-

- establish that our board of directors is divided into three classes, with each class serving three-year staggered terms;
- prohibit cumulative voting in the election of directors;
- provide that our directors may be removed only for cause;
- provide that vacancies on our board of directors may be filled by a majority of directors then in office, even if less than a quorum;
- require the approval of our board of directors or the holders of at least 66 2/3% of our outstanding shares of capital stock to amend our amended and restated bylaws and certain provisions of our amended and restated certificate of incorporation.
- authorize us to indemnify officers and directors against losses that they may incur in investigations and legal proceedings resulting from their services to us, which may include services in connection with takeover defense measures; and
- establish the Court of Chancery of the State of Delaware as the sole and exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty; any action asserting a claim against us arising pursuant to the General Corporation Law of the State of Delaware (the “DGCL”), our amended and restated certificate of incorporation, or our amended and restated bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine.

*Delaware anti-takeover statute.* We are subject to Section 203 of the DGCL (“Section 203”). Section 203 generally prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (but not the outstanding voting stock owned by the interested stockholder) shares owned (a) by persons who are directors and also officers, and (b) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- upon or subsequent to the consummation of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
  - any sale, transfer, pledge, or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;
  - subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation owned by the interested stockholder;
  - subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and
  - the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges, or other financial benefits provided by or through the corporation.
-

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with, controlling, or controlled by the entity or person.

**Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

**Listing**

Our common stock is listed on The Nasdaq Global Market under the symbol "SITM."

**Subsidiaries of SiTime Corporation**

Subsidiary	Jurisdiction
SiTime Ukraine, LLC	Ukraine
SiTime Netherlands, B.V.	Netherlands
SiTime Japan GK	Japan

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

SiTime Corporation  
Santa Clara, California

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-235255) of our report dated March 2, 2020, relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ BDO USA, LLP

San Jose, California  
March 2, 2020

**CERTIFICATION PURSUANT TO  
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,  
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Rajesh Vashist, certify that:

1. I have reviewed this Annual Report on Form 10-K of SiTime Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 2, 2020

By: \_\_\_\_\_ /s/ Rajesh Vashist

**Rajesh Vashist**  
**Chief Executive Officer**



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of SiTime Corporation (the "Company") on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 2, 2020

By: \_\_\_\_\_ /s/ Rajesh Vashist  
**Rajesh Vashist**  
**Chief Executive Officer**

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of SiTime Corporation (the "Company") on Form 10-K for the period ending December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 2, 2020

By: \_\_\_\_\_ /s/ Arthur D. Chadwick  
**Arthur D. Chadwick**  
**Executive Vice President, Chief Financial Officer**