

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

Amendment No. 2 to  
FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

## SUMMIT WIRELESS TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**5065**  
(Primary Standard Industrial Classification  
Code Number)

**30-1135279**  
(I.R.S. Employer Identification  
Number)

**Summit Wireless Technologies, Inc.**  
**6840 Via Del Oro, Ste. 280**  
**San Jose, CA 95119**  
**(408) 627-4716**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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**Chief Executive Officer**  
**Summit Wireless Technologies, Inc.**  
**6840 Via Del Oro, Ste. 280**  
**San Jose, CA 95119**  
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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

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  Accelerated filer  Non-accelerated filer  Smaller reporting company  Emerging Growth Company

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 7(a)(2)(B) of the Securities Act.

### CALCULATION OF REGISTRATION FEE

Title of Securities Being Registered	Proposed Maximum Aggregate Offering Price <sup>(1)(2)</sup>	Amount of Registration Fee
Common stock <sup>(3)(4)</sup>	\$ 7,475,000	\$ 970.26
Common stock purchase warrants to purchase shares of common stock <sup>(5)(6)</sup>	—	—
Common stock underlying common stock purchase warrants <sup>(3)(4)(6)(7)</sup>	\$ 7,475,000	\$ 970.26
Pre-funded common stock purchase warrants to purchase shares of common stock <sup>(4)(5)(8)</sup>	—	—
Common stock underlying pre-funded common stock purchase warrants <sup>(3)(4)(5)(7)</sup>	—	—

Underwriters' warrants to purchase shares of common stock <sup>(5)(8)</sup>	—	—
Common stock underlying Underwriters' warrants <sup>(3)(7)(8)</sup>	\$ 390,000	\$ 50.62
<b>Total</b>	<b>\$ 15,340,000</b>	<b>\$ 1,991.13<sup>(9)</sup></b>

- (1) In accordance with Rule 457(o) under the Securities Act of 1933, as amended (the "Securities Act"), the number of securities being registered and the proposed maximum offering price per share and per common stock purchase warrant are not included in this table.
- (2) Estimated solely for purposes of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act.
- (3) Pursuant to Rule 416 under the Securities Act, the securities registered hereby also include an indeterminate number of additional shares of common stock as may from time to time become issuable by reason of stock splits, distributions, recapitalizations or other similar transactions.
- (4) The proposed maximum offering price of the common stock proposed to be sold in this offering will be reduced on a dollar-for-dollar basis based on the offering price of any pre-funded common stock purchase warrants offered and sold in this offering.
- (5) No registration fee is required pursuant to Rule 457(g) or Rule 457(i) under the Securities Act.
- (6) The common stock purchase warrants are exercisable at a per share exercise price equal to 100% of the public offering price of one share of common stock. The proposed maximum aggregate public offering price of the shares of Common Stock issuable upon exercise of the common warrants was calculated to be \$7,475,000, which is equal to 100% of the proposed maximum aggregate public offering price of the shares of common stock in this offering.
- (7) Estimated solely for the purposes of calculating the registration fee pursuant to Rule 457(g) under the Securities Act.
- (8) The underwriters' warrants represent up to 5% of the aggregate number of shares of common stock and the shares of common stock issuable upon exercise of the pre-funded common stock purchase warrants sold in this offering and are exercisable at a per share exercise price equal to 120% of the public offering price of the shares of common stock. The proposed maximum aggregate offering price of the underwriters' warrants is \$390,000, which is equal to 120% of 5% (or \$325,000) of the proposed maximum aggregate offering price of \$6,500,000.
- (9) A filing fee of \$1,567.34 was previously paid.

**The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement related to these securities filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell or a solicitation of an offer to buy these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION

DATED APRIL 20, 2020



**Summit Wireless Technologies, Inc.**

**1,226,415 Shares of Common Stock  
Common Warrants to Purchase up to 1,226,415 Shares of Common Stock  
Pre-funded Warrants to Purchase Shares of Common Stock  
Shares of Common Stock Underlying the Pre-funded Warrants**

Summit Wireless Technologies, Inc. (the “Company”, “we”, “us” or “our”) is offering an aggregate of 1,226,415 shares (the “Shares”) of our common stock, par value \$0.0001 per share (the “Common Stock”), together with a number of common stock purchase warrants (the “Warrants”) to purchase up to an aggregate of 1,226,415 shares of Common Stock (and the shares of Common Stock that are issuable from time to time upon exercise of the Warrants). We are also offering to each purchaser whose purchase of shares of Common Stock in this offering would otherwise result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the holder, 9.99%) of our outstanding shares of Common Stock immediately following the consummation of this offering, the opportunity to purchase, if the purchaser so chooses, pre-funded warrants to purchase Common Stock (the “Pre-Funded Warrants”), in lieu of shares of Common Stock. Each Pre-Funded Warrant will be exercisable for one share of our Common Stock.

The purchase price of each Pre-Funded Warrant will equal the price per share at which the shares of Common Stock are being sold to the public in this offering, minus \$0.01, and the exercise price of each Pre-Funded Warrant will be \$0.01 per share. This offering also relates to the shares of Common Stock issuable upon exercise of any Warrants and Pre-Funded Warrants sold in this offering. For each Pre-Funded Warrant that we sell, the number of shares of Common Stock that we are offering will be decreased on a one-for-one basis. Each share of Common Stock and Pre-Funded Warrant is being sold together with an accompanying Warrant to purchase one (1) share of our Common Stock, at an exercise price of \$ per share (100% of the public offering price of one share of Common Stock). Because we will issue a Warrant for each share of our Common Stock and for each Pre-Funded Warrant sold in this offering, the number of Warrants sold in this offering will not change as a result of a change in the mix of the shares of our Common Stock and Pre-Funded Warrants sold.

The Warrants will be exercisable immediately, and will expire five years from the date of issuance. The shares of Common Stock or Pre-Funded Warrants can be purchased only with the accompanying Warrants (other than the over-allotment option), but will be issued separately and will be immediately separable upon issuance.

Our Common Stock is listed on the Nasdaq Capital Market (“Nasdaq”) under the symbol “WISA.” On April 17, 2020, the last reported sale price of our Common Stock on Nasdaq was \$5.30 per share, which gives effect to our one-for-twenty reverse stock split of our outstanding shares of Common Stock effective on April 9, 2020. The actual public offering price per share of Common Stock will be determined between us and the underwriters at the time of pricing and may be at a discount to the current market price. Therefore, the assumed public offering price used throughout this prospectus may not be indicative of the final offering price. There is no established trading market for the Warrants or the Pre-Funded Warrants, and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants or the Pre-Funded Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Warrants and the Pre-Funded Warrants will be limited.

On March 31, 2020, our stockholders approved a reverse stock split of our outstanding Common Stock at a specific ratio within a range from one-for-four to one-for-twenty, and also granted authorization to our board of directors (“Board”) to determine, in its sole discretion, the specific ratio and timing of such reverse stock split. In accordance therewith, on April 9, 2020, a one-for-twenty reverse stock split of our outstanding Common Stock became effective for the trading of our Common Stock. Unless otherwise indicated, all share and price per share information in this prospectus has been adjusted to reflect such one-for-twenty reverse stock split.

We are an “emerging growth company” as the term is used in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”) and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See “Prospectus Summary—Implications of Being an Emerging Growth Company.”

	Per Share and Accompanying Warrant	Per Pre- Funded Warrant and Accompanying Warrant	Total <sup>(1)</sup>
Public offering price <sup>(2)(3)</sup>	\$	\$	\$
Underwriting discounts and commissions <sup>(2)(3)(4)</sup>	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

(1) Assumes no sale of Pre-Funded Warrants.

(2) The public offering price is \$ per share of Common Stock and \$0.01 per accompanying Warrant and \$ per Pre-Funded Warrant and \$0.01 per accompanying Warrant.

(3) The underwriters will receive an underwriting discount equal to 8.0% of the gross proceeds in this offering, other than any sales to an investor with whom we have a pre-existing relationship, for which the underwriters will receive an underwriting discount equal to 4.0%. In addition, we have agreed to pay up to a maximum of \$100,000 of the fees and expenses of the underwriters in connection with this offering, which includes the fees and expenses of underwriters’ counsel. See “Underwriting” Section for more information.

(4) We have also agreed to issue to the underwriters warrants to purchase up to an aggregate of 61,320 shares of our Common Stock. See “Underwriting” beginning on page 54 for additional information regarding these warrants and underwriting compensation generally.

We have also granted an option to the underwriters to purchase up to an aggregate of 183,962 additional shares of Common Stock and/or Warrants to purchase up to an additional 183,962 shares of Common Stock on the same terms and conditions set forth above from us within 45 days after the date of this prospectus to cover over-allotments, if any.



We estimate the expenses of this offering, excluding underwriting discounts and commissions, will be approximately \$280,000.

**Investing in our securities involves risks. See “Risk Factors” beginning on page 11 of this prospectus for a discussion of the risks that you should consider in connection with an investment in our securities.**

The underwriters expect to deliver the Company’s securities to the purchasers on or about \_\_\_\_\_, 2020.

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

## **Maxim Group LLC**

The date of this prospectus is \_\_\_\_, 2020.

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## TABLE OF CONTENTS

	<b>Page</b>
<a href="#">Prospectus Summary</a>	<a href="#">1</a>
<a href="#">Risk Factors</a>	<a href="#">11</a>
<a href="#">Special Note Regarding Forward-Looking Statements</a>	<a href="#">27</a>
<a href="#">Industry and Market Data</a>	<a href="#">28</a>
<a href="#">Use of Proceeds</a>	<a href="#">29</a>
<a href="#">Dividend Policy</a>	<a href="#">30</a>
<a href="#">Capitalization</a>	<a href="#">31</a>
<a href="#">Dilution</a>	<a href="#">32</a>
<a href="#">Certain Relationships and Related Party Transactions</a>	<a href="#">34</a>
<a href="#">Security Ownership of Certain Beneficial Ownership and Management</a>	<a href="#">41</a>
<a href="#">Description of Securities</a>	<a href="#">44</a>
<a href="#">Description of Securities That We Are Offering</a>	<a href="#">48</a>
<a href="#">Material U.S. Federal Income Tax Considerations</a>	<a href="#">50</a>
<a href="#">Underwriting</a>	<a href="#">54</a>
<a href="#">Legal Matters</a>	<a href="#">58</a>
<a href="#">Experts</a>	<a href="#">58</a>
<a href="#">Where You Can Find More Information</a>	<a href="#">59</a>
<a href="#">Incorporation by Reference</a>	<a href="#">59</a>

The registration statement of which this prospectus forms a part that we have filed with the U.S. Securities and Exchange Commission (the “SEC”) includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC, together with the additional information described under the headings “Where You Can Find More Information” and “Incorporation by Reference” before making your investment decision.

You should rely only on the information provided in this prospectus or in any prospectus supplement or any free writing prospectuses or amendments thereto. Neither we nor the underwriters have authorized anyone else to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information in this prospectus is accurate only as of the date hereof. Our business, financial condition, results of operations and prospects may have changed since that date.

Neither we nor the underwriters are offering to sell or seeking offers to purchase these securities in any jurisdiction where the offer or sale is not permitted. Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities as to distribution of the prospectus outside of the United States.

Information contained in, and that can be accessed through, our web site, [www.summitwireless.com](http://www.summitwireless.com), does not constitute part of this prospectus.

This prospectus includes market and industry data that has been obtained from third party sources, including industry publications, as well as industry data prepared by our management on the basis of its knowledge of and experience in the industries in which we operate (including our management’s estimates and assumptions relating to such industries based on that knowledge). Management’s knowledge of such industries has been developed through its experience and participation in these industries. While our management believes the third-party sources referred to in this prospectus are reliable, neither we nor our management have independently verified any of the data from such sources referred to in this prospectus or ascertained the underlying economic assumptions relied upon by such sources. Internally prepared and third party market forecasts, in particular, are estimates only and may be inaccurate, especially over long periods of time. In addition, the underwriters have not independently verified any of the industry data prepared by management or ascertained the underlying estimates and assumptions relied upon by management. Furthermore, references in this prospectus to any publications, reports, surveys or articles prepared by third parties should not be construed as depicting the complete findings of the entire publication, report, survey or article. The information in any such publication, report, survey or article is not incorporated by reference in this prospectus.

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## PROSPECTUS SUMMARY

*This summary highlights information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our securities, you should carefully read this entire prospectus and the documents incorporated by reference herein, including our consolidated financial statements and the related notes and the information set forth under the sections titled “Risk Factors” and “Special Note Regarding Forward-Looking Statements”. Unless the context otherwise requires, we use the terms “Summit,” “Company,” “our,” “us,” and “we” in this prospectus to refer to, prior to the corporate conversion discussed below, Summit Semiconductor, LLC, and after the corporate conversion, to Summit Wireless Technologies, Inc. (f/k/a Summit Semiconductor, Inc.) and, where appropriate, in each case our consolidated subsidiaries.*

### Summit Wireless Technologies, Inc.

#### Overview

We believe that the future of audio technology is in wireless devices and that Summit is well positioned to deliver best-in-class immersive wireless sound technology for intelligent devices and next generation home entertainment systems. We currently sell modules which wirelessly transmit and receive audio directly to speakers. Additionally, we plan to license our proprietary software technology, currently embedded in our wireless modules, to other companies who can then embed our technology into other Wi-Fi enabled smart devices. The segment of the wireless audio market that Summit focuses on is comprised of scalable multichannel solutions with levels of latency that are low enough to synchronize with video. The term multichannel refers to the use of multiple audio tracks to reconstruct a sound field using multiple speakers.

As part of the effort to grow the wireless multichannel home audio segment, Summit was a founding member of the WiSA Association, an association dedicated to providing industry leadership and consumer choice through interoperability testing between brands. There are currently over 60 brands participating in the WiSA Association. Products certified and marked with a WiSA Association logo have been tested to interoperate. This preserves consumer choice by enabling consumers to choose different wireless transmitting products across different brands where audio is decoded with speakers that have the WiSA Association logo displayed. Our marketing strategy focuses on, what we believe, are two emerging wireless audio market needs: better audio quality and lower signal latency. Summit currently sells custom semiconductor chips and wireless modules to a growing list of consumer electronics customers, including major brands in the consumer electronic industry. We believe that a growing adoption of our technology by leaders in this industry will revolutionize the way people experience media content through their mobile devices, televisions (“TVs”), game consoles and personal computers (“PCs”).

#### Our Business Focus

Our primary business focus is to enable mainstream consumers and audio enthusiasts to experience high quality wireless audio. We intend to continue selling our proprietary wireless modules to consumer electronics companies while also expanding our focus to implement a lower cost solution by porting our software onto commercially available internet of things (“IoT”) modules with integrated Wi-Fi technology.

#### Industry Background

The primary growth segments for in home entertainment have been “Bluetooth” stereo accessories which include single speakers, headsets, and more recently, “multi-room” stereo speakers that use your home’s Wi-Fi network to stream audio throughout the house. The information contained in or accessible through the foregoing website is not part of this prospectus, or the registration statement of which this prospectus forms a part, and is for informational purposes only.

#### Our Technology

Our technology addresses some of the main issues that we perceive are hindering the growth of the home theater: complexity and cost. We believe that consumers want to experience theater quality surround sound from the comfort of their homes. However, wired home theater systems often require expensive audio-visual (“AV”) receivers to decode the audio stream, leaving the consumer with the burden of concealing the wires. Hiring a professional to hide the wires into the walls or floor is invasive, complicated, costly and time consuming. Further, people that rent as opposed to own may not be able to install these systems as the installation construction needed may not be permitted under a lease agreement. Our first-generation wireless technology addresses these problems by transmitting wireless audio to each speaker at Blu-ray quality (uncompressed 24-bit audio up to 96 kHz sample rates) and emphasizing ease of setup. To our knowledge, Summit’s custom chips and modules technology is one of the only technologies available today that can stream up to eight (8) separate wireless audio channels with low latency, removing lip-sync issues between the audio and video sources. In addition, every speaker within a system that utilizes our technology can be synchronized to less than one microsecond, thus eliminating phase distortion between speakers. Summit’s first-generation technology shows that wireless home theater systems are viable home audio solutions for the average consumer and audio enthusiast alike.

Summit is currently developing certain proprietary software for which patent applications have been submitted that we believe will allow us to enable smart devices that have Wi-Fi and video media to deliver surround sound audio. A prototype version of our software technology has been demonstrated to select customers (pursuant to confidentiality agreements) at recent Consumer Electronics Shows in Las Vegas, Nevada. Our goal is to commercialize a software based-solution, which other brands can integrate into their devices, that will (i) reduce integration costs for mass market use, (ii) utilize Wi-Fi for wireless connectivity, making it easy to integrate into today's high volume, low cost systems on a chip ("SOC") and modules, (iii) provide a low power consumption option to allow for use in battery powered devices, and (iv) provide compatibility with popular consumer electronic operating systems.

#### **WiSA Association**

Our wholly-owned subsidiary, WiSA, LLC, operates the WiSA Association, which is an association comprised of brands, manufacturers, and influencers within the consumer electronics industry, all of which agree that a standardized method of interoperability between wireless audio components should exist, and most of which believe that products should be brought to market with this goal in mind. The WiSA Association creates, maintains and manages specifications for wireless interoperability that are available to all association members. For products with a WiSA Association certification, the WiSA Association also creates, maintains and manages testing criteria and specifications for all products to be listed, marketed and sold. WiSA-certification is an industrywide "stamp of approval" certifying that a product is interoperable with other products in the WiSA ecosystem and has passed several high-performance tests ensuring interoperability and wireless performance standards are met. As the sole owner of WiSA, LLC, we certify all WiSA Association products.

In 2018, the Company introduced the WiSA Ready<sup>TM</sup> certification. The WiSA Ready<sup>TM</sup> certification identifies entertainment sources – such as TVs, gaming systems or computers – that are equipped to deliver up to eight (8) channels of HD audio to WiSA-certified speakers when connected with a WiSA Universal Serial Bus ("USB") transmitter. This program simplifies consumer set-up and reduces costs by replacing AV receivers or wireless hubs with a low-cost USB accessory. We believe that using WiSA Ready<sup>TM</sup> products allows consumers to more simply and conveniently enjoy wireless multi-channel sound, eliminating the clutter, wires and complicated installs generally required to create immersive audio experiences. LG Electronics introduced two premium model lines, OLED and Nanocell TVs, as WiSA Ready<sup>TM</sup> TVs in 2019 and has continued the feature in their 2020 TVs. The Company expects two to three other TV projects to go into production in 2020 and anticipates three to four additional TV brands to be marketing WiSA projects in 2021.

Currently, WiSA-certified products are required to use Summit modules in order to meet the standards set by the WiSA Association. As a result, WiSA Association members purchase modules from us in order to build their products to meet such standards.

Among WiSA-certified products, consumers will be able to outfit their home entertainment system with WiSA-certified speakers and components from any participating vendor with the assurance that the devices will interoperate and provide high quality wireless HD surround sound.

The WiSA Association manages logo usage and trademark guidelines, investigates alternative markets, connects brands to manufacturing resources, and, we believe, provides industry leadership in solving the challenges facing the home theater and commercial markets in the integration of wireless audio technology.

WiSA Association web traffic has experienced recent dramatic growth in unique user visits to its site. Traffic increased by 1,199 visits in the first quarter of 2019, 2,259 visits during the second quarter of 2019, 3,434 visits during the third quarter of 2019, 19,217 visits during the fourth quarter of 2019 and 32,383 visits during the first quarter of 2020 (from January 1, 2020 to March 18, 2020). The WiSA Association utilizes Google analytics to identify and measure unique user web traffic.

## **Modules**

Summit has designed wireless modules that provide high performance wireless audio for our customers to integrate into their products, such as a speaker, TV, media hubs and USB or HDMI dongles. These modules include our custom semiconductors with our intellectual property (“IP”) built in as well as a Wi-Fi radio for communications. By designing and selling these modules, we can reduce our customers’ design expense, accelerate their time-to-market cycle, and reduce the cost of each module. Summit offers both a “TX” module to transmit the audio from a host device like a media hub, TV or dongle to WiSA-enabled speakers and an “RX” model for speakers that receive the wireless audio signal and processes it for audio play out.

### **Modules for Consumer Products**

Summit’s TX modules are targeted for integration into TVs, AV receivers, media hubs and USB or HDMI dongles. Summit’s transmitter, with its integrated antenna, is designed to support rooms as large as 10-meters by 10-meters with uncompressed, 24-bit audio up to 96 kHz sample rate. The module supports a simple interface, with Inter-IC Sound (“I2S”) or USB audio and control. In addition, Summit’s technology has been approved by Digital Content Protection, LLC, the licensing agency for High-bandwidth Digital Content Protection, as an audio only output technology for retransmission of audio content.

Summit’s receiver interfaces to a digital amplifier and is designed to be integrated directly into a home theater speaker. The four printed circuit board antennas simplify system integration while providing robust reception of 24-bit audio up to 96 kHz sample rates virtually anywhere within a 10-meter by 10-meter space. It supports one or two separate audio outputs via I2S. An optional interface on the receiver module can be enabled to configure the speaker type and provide volume/mute control at the speaker. Alternatively, the speaker type can be assigned at the factory for preconfigured Home Theater in a Box applications.

### **The Summit Opportunity**

We believe that the following attributes: cost, mobility, video support, ease of installation and quality create a market opportunity for Summit’s technologies to be adopted by the consumer electronics industry as described further below.

#### Cost

We believe that the simplicity and cost structure of our current WiSA USB transmitter and upcoming embedded software solution will make our prices competitive for a wider range of applications, allowing consumer electronics companies to integrate our technology, while also delivering high quality audio.

#### Mobility

Mobile devices are popular for streaming video, gaming and using virtual reality applications. We believe that this is driving a need for an embedded high-fidelity wireless solution in the mobile device that can transmit audio to headsets or speakers within a room. Summit’s technology enables high quality wireless audio transmission from mobile devices.

#### Video Support

Wireless audio capable of supporting video has become a priority for consumers across a variety of high-volume multimedia platforms, including TV’s, smartphones, game consoles and set-top boxes. Video applications require audio and video to be perfectly synchronized in order to avoid lip-sync and speaker audio phase distortion issues. Summit’s technology prioritizes low latency and synchronization to less than one microsecond, thus practically eliminating phase distortion between speakers.

### Ease of Installation

We believe that the home theater market has moved toward simplicity in recent years. The costly and inconvenient home theaters of the past have left consumers with a desire for audio systems that provide a simplified installation process. We believe that new audio systems, including the predominant sound bar system, are unable to provide high levels of performance, especially in the surround-sound market. Summit's technology greatly simplifies the installation process of true surround-sound systems. This allows consumers to install a home theater system with the same amount of effort as a sound bar, but enjoy a far superior experience. We believe that an overwhelming majority of the content entering consumers' homes through digital TV and streaming services is provided in a multi-channel format, which is why Summit's goal is to facilitate enjoyment of true surround sound for both the everyday consumer and audio enthusiast.

In addition to easy installation, Summit modules provide consumers with a multitude of options, allowing customization of a home theater specific to each consumer, without being forced to stick with one brand of speaker. For example, our hope is that a consumer might start with a Summit enabled sound bar for their TV and then add a Summit enabled subwoofer. That same system can be easily upgraded to a variety of surround sound systems by simply adding more speakers. Our technology will allow consumers to upgrade an audio system or just one component of the system without the need to replace the entire system. Consumers can keep the original transmitter, sound bar, and subwoofer and integrate them seamlessly into a new system. Being able to outfit a home entertainment system with Summit-enabled speakers and components gives consumers the ability to express their individual preference and needs and provides the assurance that the devices will interoperate, delivering what we believe is the highest standard in HD wireless surround sound.

### Dissatisfaction with Bluetooth Performance and Quality

We believe that consumers want better performance and quality from their Bluetooth audio devices. For example, they may want headsets that stay connected over longer distances or products that offer better audio fidelity. By offering a solution that addresses these needs at a comparable price point to Bluetooth, we believe that we can build consumer demand for our technology.

### Profitability of Audio Component Accessories

High-definition televisions ("HDTVs") are getting thinner and it is becoming increasingly difficult to incorporate the latest electronic advances into such thin displays. Over two hundred million smart TVs are currently sold annually. We expect that eventually most of the electronics will be external to the display. We believe that the first physical feature to be removed from HDTVs will be the audio component, since there is very little room for quality speakers in today's thin displays. We believe that HDTV manufacturers know that they need to provide an audio alternative. Additionally, since cost is a significant consideration, we believe that some manufacturers may offer external sound bars which will satisfy some consumers, but perhaps not the consumers who desire a high-quality audio alternative. Over thirty-five million sound bars are forecasted to be sold in 2020 by Statista. We believe that these developments are creating an inflection point in the market, and manufacturers are looking to Summit's technology to create a standard for wireless audio interoperability that will support a long-term product strategy for the successful development of high quality, wireless audio products. By designing speaker systems that incorporate Summit's technology, consumer electronics companies will be able to sell easy-to-install surround sound audio solutions alongside TVs.

### Enjoyment of improved audio on existing content

We believe that the growth in the number of video devices streaming multi-channel audio content, coupled with new 3D immersive sound experiences from Dolby's ATMOS and DTS' DTSx formats, will help propel the demand for wireless speakers well into the future.

### Enjoyment of wireless audio without interference from other wireless signals

Having other devices nearby that also use the 5 GHz band should not affect the performance of a Summit-enabled audio system, as Summit's technology can seamlessly switch to another frequency within the 5 GHz band. The 5 GHz U-NII spectrum utilized by Summit technology has up to 24 channels available that are constantly monitored for interference using the Dynamic Frequency Selection sub-band between 5.2 and 5.8 GHz. When interference is detected, the next channel, having been monitored for over one minute and confirmed for accessibility, is ready to be accessed and Summit-enabled devices switch seamlessly to that channel, without the user ever noticing or the audio experience being affected.

### What Distinguishes Summit from its Competitors

Both the proprietary technology and the adoption of the technology by leaders in consumer electronics are differentiating factors for Summit. Management believes that Summit is one of the only companies with the technical capabilities of transmitting high resolution, low latency, and speaker synchronization of wireless audio capable of supporting up to 8 channels. Premium consumer brands, like Bang & Olufsen, Harman International, a division of Samsung and LG Electronics, have begun to adopt our technology as a valued feature in performance products.

## Category Defining Wireless Audio

Our wireless audio technology delivers 8 channels of uncompressed audio directly to the speakers in 24-bit and up to 96 kHz sample rates. This means that a consumer can experience audio exactly as it was mastered in the studio. Summit's technology supports surround sound systems up to 7.1 or 5.1.2 for Dolby ATMOS configurations.

Alternative technologies such as, standard Bluetooth and WiFi protocols were not designed to transmit real-time audio synchronized to video. Standard Bluetooth and WiFi technologies work best for audio only applications when video is not a part of the listening experience. In audio only applications latency is less critical and can be buffered in memory to insure proper speaker synchronization even when audio data retransmissions are needed in today's congested wireless environments. In video applications retransmissions add to latency. Standard Bluetooth and WiFi protocols have long variable latency that can exceed 50ms resulting in lip-sync issues and variable speaker synchronization making quality multichannel audio experience unachievable. A few custom software and or silicon based solutions exist today that improve performance, but compared to Summit, have longer latencies, lower performing speaker synchronization, and are limited to 2-4 audio channels and often limited to 16-bit CD quality audio.

Summit's technology roadmap includes proprietary software, currently in development, that will support Wi-Fi protocol. This proprietary software has been designed to scale in audio channel count and sample rates even as Wi-Fi performance or network utilization changes.

## Summit Customers

Summit currently sells wireless modules containing custom semiconductor chips to a growing list of consumer electronics customers, including major brands such as Axiim, Bang & Olufsen, Enclave Audio, Klipsch, LG, Harman International, a division of Samsung, Sharp, Savant and System Audio. We believe that the use of our products by well-known consumer electronics brands will provide an opportunity to create wireless audio products that are simple to install and perform at high levels. Brands such as Bang & Olufsen and Klipsch have chosen Summit technology to drive their wireless home audio/theater product assortments. We believe that their leadership has brought credibility to the technology and paved the way at retail for other brands to follow.

## Our Strategy

Our goal is to establish and maintain a leadership position as the ubiquitous standard for hi-fidelity wireless, multi-channel audio. To obtain and enhance our position as the leading standard in the audio space, we intend to:

- improve recognition of our Summit brand and the WiSA Association standard brand;
- provide excellent products and services to our customers and members;
- make sure our technology is accessible to many consumers by having our technology in consumer electronics devices that sell at a variety of price points;
- expand market awareness of wireless multi-channel hi-fidelity audio experience availability;
- reduce hardware costs;
- enhance and protect our IP portfolio;
- invest in highly qualified personnel; and
- build innovative products alongside the world's leading consumer electronics companies.

We currently sell our modules in relatively small quantities. As new customers introduce Summit-enabled products and current customers introduce second and third generation Summit-enabled products, we expect that orders for our modules will increase proportionally. With larger orders, we believe that we can take advantage of economies of scale and improve our gross margins on our modules.

## Interoperability

Interoperability is a key aspect of wireless technology. We believe that this is especially true in audio, where unique designs, price points, audio quality and capabilities as well as consumer brand loyalties are significant factors for the end consumer. Creating home theater and audio components that all work with an interoperable standard creates a high level of confidence in retailers and consumers and helps drive the entire category. Interoperability also increases the opportunity for specialized brands to create new and innovative products knowing they can focus on their specific part of the market and rely on others to create the necessary cohort components.

## Corporate Information

We were formed as Summit Semiconductor, LLC, a Delaware limited liability company, on July 23, 2010. We converted to a Delaware corporation, effective December 31, 2017, at which time we changed our name to Summit Semiconductor, Inc. Effective as of September 11, 2018, we changed our name to Summit Wireless Technologies, Inc. We run our operations through Summit Wireless Technologies, Inc., as well as through our wholly-owned subsidiaries, Summit Wireless Japan K.K., a Japanese corporation, and WiSA, LLC, a Delaware limited liability company.

## Where You Can Find Us

Our principal executive offices are located at 6840 Via Del Oro, Ste. 280, San Jose, CA 95119 and our telephone number is (408) 627-4716. Our website address is [www.summitwireless.com](http://www.summitwireless.com). The website for the WiSA Association is <http://www.wisaassociation.org>. The information contained on, or that can be accessed through, our websites is not incorporated by reference into this prospectus and is intended for informational purposes only.

Summit Wireless Technologies, Summit Semiconductor, Summit Wireless<sup>TM</sup>, the Summit Wireless Technologies, Inc. logo, the WiSA logo and other trade names, trademarks or service marks of Summit Wireless Technologies, Inc. appearing in this prospectus are the property of Summit Wireless Technologies, Inc. Trade names, trademarks and service marks of other companies appearing in this prospectus are the property of their respective holders.

## Risks Affecting Our Business

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled “Risk Factors” immediately following this prospectus summary. These risks include, among others, the following:

- Our success depends on maintaining and increasing our sales, which depends on factors we cannot control, including the viability and reputation of our customers and their products.
- If we are unable to sell our modules into new markets or to new consumer electronics companies, our revenue may not grow.
- If our business does not grow as we expect, or if we fail to manage our growth effectively, our operating results and business prospects would suffer.
- Our business is dependent upon our ability to deploy and deliver our solutions, and the failure to meet our customers’ expectations could harm our reputation, which may have a material adverse effect on our business, operating results and financial condition.
- We have not been profitable historically and may not achieve or maintain profitability in the future.
- We may require additional capital to fund our business and support our growth, and our inability to generate and obtain such capital on acceptable terms, or at all, could harm our business, operating results, financial condition and prospects.
- We face risks related to health epidemics and other outbreaks, which could significantly disrupt our operations and could have a material adverse impact on us, and the recent coronavirus outbreak could materially and adversely affect our business.
- We have been notified by Nasdaq of our failure to comply with certain continued listing requirements and if we are unable to regain compliance with all applicable continued listing requirements and standards of Nasdaq, our Common Stock could be delisted from Nasdaq.

## Recent Developments

### *Nasdaq Notification*

On October 16, 2019, we received a written notification (the “Notice”) from the Nasdaq Stock Market LLC (“Nasdaq”) indicating that we were not in compliance with Nasdaq Listing Rule 5550(a)(2), as the closing bid price of the Common Stock was below \$1.00 per share for the previous thirty (30) consecutive business days (the “Minimum Bid Price Requirement”). Pursuant to Nasdaq Listing Rule 5810(c)(3)(A), the Company was granted a 180-calendar day compliance period, or until April 13, 2020, to regain compliance with the Minimum Bid Price Requirement. To regain compliance, the closing bid price of our shares of Common Stock would have had to meet or exceed \$1.00 per share for at least ten (10) consecutive business days during the 180-calendar day grace period. During such compliance period, our shares of Common Stock continued to be listed and traded on the Nasdaq Capital Market, however, the closing bid price of our Common Stock has not satisfied this requirement because it will not have met or exceeded \$1.00 per share for at least ten (10) consecutive business days during such period. As a result, we expect to receive a delisting notice from Nasdaq stating that Nasdaq will initiate proceedings to delist our Common Stock due to our failure to comply with the Minimum Bid Price Requirement within such compliance period, but that we may appeal such delisting determination and may be afforded a second 180-calendar day grace period. To qualify for such second grace period, we would be required to meet the continued listing requirement for market value of publicly held shares and all other Nasdaq listing standards, with the exception of the Minimum Bid Price Requirement, which we currently do not meet. In addition, we believe that the one-for-twenty reverse stock split of our outstanding Common Stock, which became effective for trading on April 9, 2020, will have a positive impact on our ability to cure such minimum bid price deficiency. If we do not regain compliance within the allotted compliance period(s), including any extensions that may be granted by Nasdaq, Nasdaq will provide notice that our shares of Common Stock will be subject to delisting. We intend to monitor the closing bid price for our Common Stock and will consider available options to resolve our non-compliance with the Minimum Bid Price Requirement, as may be necessary. On April 17, 2020, the SEC approved Nasdaq’s proposed change to certain of its listing rules, including the Minimum Bid Price Requirement, which extends the period of time in which Nasdaq-listed companies are required to regain compliance with such rules by tolling such compliance periods to June 30, 2020. As of the date of this prospectus, we have not received any communications from Nasdaq regarding our compliance with the Minimum Bid Price Requirement. Additionally, even if we are able to satisfy the Minimum Bid Price Requirement as a result of such reverse stock split, there can be no assurance that we will be able to comply with Nasdaq’s other listing standard, including the Stockholders’ Equity Requirement (as defined below) or the Audit Committee Rule (as defined below), with which we are currently not in compliance.

On November 18, 2019, we were officially notified by Nasdaq that we did not comply with Listing Rule 5550(b) (the “Rule”), which requires a minimum of \$2,500,000 stockholders’ equity (the “Stockholders’ Equity Requirement”), among other listing criteria. We were required to submit to Nasdaq a plan to regain compliance with the Stockholders’ Equity Requirement for consideration by the Nasdaq Listing Qualifications staff (“Nasdaq Staff”) by no later than January 2, 2020. On January 2, 2020, we submitted a plan to regain compliance (the “Compliance Plan”) to the Nasdaq Staff. On March 23, 2020, the Nasdaq Staff accepted the Compliance Plan and granted us an extension period pursuant to which we must regain compliance with the Rule. Among other things, the terms of such extension include that we must complete an equity raise on or before May 18, 2020, and must publicly disclose on a Current Report on Form 8-K our prior non-compliance with the Rule and the terms of such equity raise enabling us to regain compliance with the Rule. Notwithstanding the terms of such extension period, if we fail to evidence compliance with the Rule upon the filing of our periodic report for the period ending June 30, 2020, the Nasdaq Staff will provide written notification that our Common Stock will be delisted from Nasdaq, however we may appeal such delisting determination to Nasdaq’s hearing panel.

On March 24, 2020, we were officially notified by Nasdaq that we did not comply with Listing Rule 5605 (the “Audit Committee Rule”), which requires that the audit committee of our Board include at least three independent directors. In accordance with Nasdaq’s Listing Rules, we have been granted a cure period in order to regain compliance with the Audit Committee Rule, which period ends on (i) the earlier of (x) our next annual stockholders’ meeting or (y) February 10, 2021 or (ii) if such annual stockholders’ meeting is held before August 10, 2020, then we must evidence compliance with the Audit Committee Rule no later than that date. If we fail to evidence compliance with the Audit Committee Rule upon such period’s end, the Nasdaq Staff will provide written notification that our Common Stock will be delisted from Nasdaq, however we may appeal such delisting determination to Nasdaq’s hearing panel.

If we fail to achieve compliance with all applicable Nasdaq listing requirements, we may be delisted from Nasdaq.

### *Funding Agreement*

As previously disclosed in our Annual Report on Form 10-K filed with the SEC on March 25, 2020, on January 23, 2020, we entered into a funding agreement, as amended (the “Funding Agreement”), which provided for the issuance to an unaffiliated accredited investor of a convertible promissory note in the principal amount of \$111,100, reflecting a 10% original issue discount, 500 shares of our Common Stock and a five-year warrant exercisable for 7,936 shares of our Common Stock at an exercise price of \$9.80 per share in consideration for \$100,000, which was funded on January 24, 2020. Additionally, pursuant to the Funding Agreement, such investor was granted a most favored nation right. As of the date of this prospectus, the outstanding debt owed to such investor pursuant to the Funding Agreement has been fully repaid.

### *February 2020 Private Placement*

On February 28, 2020, the Company completed a private placement (the “February 2020 Private Placement”) of \$835,000 of units (the “Units”), each consisting of (i) one (1) share of Common Stock and (ii) a warrant to purchase 0.50 of a share of Common Stock (the “February 2020 Warrants”), at a price per Unit of \$9.17. The Units were issued pursuant to a Unit Purchase Agreement, dated February 4, 2020, and a subscription agreement, dated February 28, 2020 by and among the Company and the purchasers signatory thereto. The February 2020 Private Placement, which was priced above market, resulted in gross proceeds of \$835,000 before fees and other expenses associated with the transaction. The proceeds of such offering are being used primarily toward increasing stockholders’ equity in order to comply with Nasdaq Listing Rule 5550(b) and for general corporate purposes.

The February 2020 Warrants are exercisable to purchase up to an aggregate of 45,526 shares of Common Stock commencing on the date of issuance at an exercise price of \$9.80 per share, subject to adjustment upon stock splits, reverse stock splits, and similar capital changes. The February 2020 Warrants are exercisable immediately and will expire on the close of business on February 28, 2025. The exercise of the February 2020 Warrants are subject to beneficial ownership limitations such that each holder of such February 2020 Warrant may exercise it to the extent that such exercise would result in such holder being the beneficial owner in excess of 4.99% (or, upon election of such holder, 9.99%), which beneficial ownership limitation may be increased or decreased up to 9.99% upon notice to the Company, provided that any increase in such limitation will not be effective until 61 days following notice to the Company.

### *March 2020 Senior Secured Convertible Promissory Note*

On March 30, 2020, the Company completed a private placement (the “March 2020 Private Placement”) of a senior secured convertible instrument (the “March 2020 Note”) and a warrant (the “March 2020 Warrant”) to purchase 227,679 shares of Common Stock at an exercise price of \$6.40 per share, pursuant to which Maxim Group LLC, the representative of the underwriters in this offering (“Maxim”), acted as placement agent. The March 2020 Note and March 2020 Warrant were issued pursuant to a securities purchase agreement, entered into as of March 22, 2020 (the “March 2020 Purchase Agreement”) by and between the Company and an institutional investor (the “Investor”). The March 2020 Private Placement resulted in gross proceeds of \$1,700,000, before fees and other expenses associated with the transaction, including but not limited to, an \$85,000 commitment fee payable to the Investor. The net proceeds to be received by the Company in connection with the March 2020 Private Placement will be used primarily for working capital, debt repayment and general corporate purposes. Additionally, the Company agreed to issue to Maxim a warrant to purchase up to an aggregate of 20,400 shares of Common Stock, subject to adjustment, as partial consideration for serving as placement agent in connection with the March 2020 Private Placement.

## *Reverse Stock Split*

On March 31, 2020, the Company held a special meeting of its stockholders, at which its stockholders approved an amendment to the Company's certificate of incorporation, as amended, to effect a reverse stock split of all of the outstanding shares of Common Stock at a specific ratio within a range from one-for-four to one-for-twenty, and to grant authorization to the Board to determine, in its sole discretion, the specific ratio and timing of the reverse stock split. In order to maintain compliance with Nasdaq listing requirements discussed above, our Board utilized this authority and authorized a reverse stock split ratio of one-for-twenty, effective for trading on April 9, 2020.

### *Letter from Alexander Capital, L.P.*

On April 3, 2020, we received a letter (the "April 3<sup>rd</sup> Alexander Counsel Letter") from counsel for Alexander Capital, L.P. ("Alexander"), alleging that we were in apparent breach of our engagement agreement, dated February 6, 2020, that we entered into with Alexander (the "Alexander Engagement Agreement"), which appointed Alexander as our exclusive placement agent and financial advisor, due to our consummation of the March 2020 Private Placement, in which Maxim acted as placement agent. Such letter also claims that due to such alleged breach, and in accordance with the terms of the Alexander Engagement Agreement, we owed Alexander an aggregate of \$170,000 and warrants to purchase up to 22,768 shares of Common Stock in connection with the March 2020 Private Placement. The April 3<sup>rd</sup> Alexander Counsel Letter further states that in an effort to avoid needless time and effort involved in resolving the dispute, that Alexander is willing to forego any claim to the issuance of warrants to it and to settle the dispute in consideration of our payment of \$170,000 (the "Alexander Settlement Offer").

By letter dated April 7, 2020, we responded to the April 3<sup>rd</sup> Alexander Counsel Letter addressing Alexander's claims by asserting that the Alexander Engagement Letter had been properly terminated and that we were, therefore, not required to pay any compensation to Alexander in connection with the March 2020 Private Placement nor are we required to offer Alexander the first opportunity to provide its services as placement agent or underwriter nor pay Alexander any compensation in connection with any other offering including, without limitation, any offering in which Maxim is the placement agent or underwriter, including this offering.

On April 10, 2020, we received a second letter (the "April 10<sup>th</sup> Alexander Counsel Letter"), from Alexander's counsel, responding to our April 7<sup>th</sup> letter. The April 10<sup>th</sup> Alexander Counsel Letter (i) disputes all of our arguments relating to the termination of the Alexander Engagement Agreement; (ii) appears, by implication, to withdraw the Alexander Settlement Offer offered in the April 3<sup>rd</sup> Alexander Counsel Letter to settle Alexander's claim against us; and (iii) makes specific reference to the engagement of Maxim as underwriter, in connection with this offering, claims that such engagement is a further breach of the Alexander Engagement Agreement and states that Alexander believes that it would be entitled to seek further damages for breach, as a result thereof. Additionally, there is language in the April 10<sup>th</sup> Alexander Counsel Letter stating that if we had engaged Maxim prior to closing a financing on February 28, 2020 in which Alexander was placement agent, without disclosing our prior engagement of Maxim to investors in that financing, that this would raise additional issues. Finally, Alexander has demanded that we cease this offering immediately and that if we proceed with this offering, it will seek to be compensated as if it had acted as underwriter in this offering. On April 16, 2020, we received a third letter from Alexander's counsel that Alexander intends to file an action in connection with such claims.

We continue to engage in discussions with Alexander and its counsel regarding such alleged breaches claimed by Alexander and alleged compensation owed, including any alleged breaches relating to this offering, however we cannot predict whether such discussions will result in the filing of any action against us or the entering into of any settlement agreements between us and Alexander, the timing of any such agreement, or the terms thereof.

### **Implications of Being an Emerging Growth Company**

We are an "emerging growth company" as defined in the JOBS Act. For as long as we are an emerging growth company, unlike public companies that are not emerging growth companies under the JOBS Act, we will not be required to:

- provide an auditor's attestation report on management's assessment of the effectiveness of our system of internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002 (the "Sarbanes Oxley Act");
- provide more than two years of audited financial statements and related management's discussion and analysis of financial condition and results of operations;
- comply with any new requirements adopted by the Public Company Accounting Oversight Board (the "PCAOB") requiring mandatory audit firm rotation or a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements of the issuer;
- provide certain disclosure regarding executive compensation required of larger public companies or hold stockholder advisory votes on the executive compensation required by the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"); or
- obtain stockholder approval of any golden parachute payments not previously approved.

We will cease to be an emerging growth company upon the earliest of the:

- last day of the fiscal year in which we have \$1.07 billion or more in annual revenues;
- date on which we become a "large accelerated filer" (the fiscal year-end on which the total market value of our common equity securities held by non-affiliates is \$700 million or more as of the last business day of our most recently completed second fiscal quarter, which ends on June 30);
- date on which we issue more than \$1.0 billion of non-convertible debt over a three-year period; or
- last day of the fiscal year following the fifth anniversary of our initial public offering.

In addition, Section 107 of the JOBS Act 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, and we have elected to take advantage of such extended transition period for complying with new or revised accounting standards.

We have elected to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of these elections, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests. In addition, it is possible that some investors will find our common stock less attractive as a result of these elections, which may result in a less active trading market for our Common Stock and higher volatility in our stock price.

## The Offering

Shares of Common Stock offered by us	1,226,415 shares (1,410,377 shares if the underwriters exercise their over-allotment option in full to purchase shares of Common Stock at the public offering price) at an assumed public offering price of \$5.30 per share, which is the last reported sale price of our Common Stock on Nasdaq on April 17, 2020, and assuming no sale of Pre-Funded Warrants by us.
Pre-Funded Warrants offered by us	We are also offering Pre-Funded Warrants to purchasers whose purchase of shares of Common Stock in this offering would otherwise result in any such purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of Common Stock immediately following the consummation of this offering, the opportunity to purchase, if any such purchaser so chooses, Pre-Funded Warrants, in lieu of shares of Common Stock that would otherwise result in such purchaser's beneficial ownership exceeding 4.99% (or, at the election of the purchaser, 9.99%) of our outstanding shares of Common Stock. Each Pre-Funded Warrant will be exercisable for one share of Common Stock. The purchase price of each Pre-Funded Warrant will be equal to the price per share at which shares of Common Stock are sold to the public in this offering, minus \$0.01, and the exercise price of each Pre-Funded Warrant will be \$0.01 per share. This offering also relates to the shares of Common Stock issuable upon exercise of any Pre-Funded Warrant sold in this offering. The Pre-Funded Warrants will be exercisable immediately and may be exercised at any time until all of the Pre-Funded Warrants are exercised in full. For each Pre-Funded Warrant that we sell, the number of shares of Common Stock that we are offering will be decreased on a one-for-one basis.
Warrants offered by us	We are also offering Warrants to purchase up to an aggregate of 1,226,415 shares of Common Stock (other than with respect to shares of Common Stock purchased in connection with the over-allotment option). Each share of Common Stock and each Pre-Funded Warrant is being sold together with a Warrant to purchase one share of Common Stock. Each Warrant will have an exercise price of \$ per share, which is 100% of the public offering price per share of our Common Stock in this offering, and will be immediately exercisable and will expire on the fifth anniversary of the original issuance date. This offering also relates to the shares of Common Stock issuable upon exercise of the Warrants. The Warrants may be exercised on a cashless basis if there is no effective registration statement registering the shares of Common Stock underlying the Warrants.
Option to purchase additional securities	We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase up to an additional 183,962 shares of Common Stock and/or Warrants to purchase up to an additional 183,962 shares of our Common Stock, based on the assumed public offering price of \$5.30 per share, less the underwriting discount.
Total shares of Common Stock to be outstanding after this offering	2,563,482 shares (assuming no sale of any Pre-Funded Warrants, no exercise of any Warrants and no exercise of the underwriters' over-allotment option).
Use of proceeds	We estimate that we will receive net proceeds of approximately \$5,700,000 (or \$6,597,000 if the underwriters fully exercise their over-allotment option solely for shares of our Common Stock), excluding any exercise of the Pre-Funded Warrants or the Warrants issued in connection with this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We expect to use the net proceeds of this offering for product development, repayment of debt, sales and marketing, working capital, capital expenditures and other general corporate purposes. These expectations are subject to change.  See "Use of Proceeds" for additional information.
Underwriters' Warrants	The registration statement of which this prospectus is a part also registers for sale warrants to purchase up to 61,320 shares of our Common Stock issuable to Maxim Group LLC, as the representative of the underwriters (the "Underwriters' Warrants"), as a portion of the underwriting compensation payable to the underwriters in connection with this offering. The Underwriters' Warrants will be exercisable for a five-year period commencing 180 days following the effective date of the registration statement of which this prospectus is a part at an exercise price equal to 120% of the public offering price of the Common Stock. Please see "Underwriting — Underwriters' Warrants" for a description of these warrants.
Risk factors	See "Risk Factors" beginning on page 11 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our Common Stock.
Market symbol and trading	Our Common Stock is listed on The Nasdaq Capital Market under the symbol "WISA." There is no established trading market for the Pre-Funded Warrants or the Warrants and we do not expect a market for such securities to develop. In addition, we do not intend to apply for the listing of the Pre-Funded Warrants or the Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Pre-Funded Warrants and the Warrants will be limited.

Unless otherwise indicated, all information in this prospectus refers to or assumes the effectiveness of our one-for-twenty reverse stock split effective on April 9, 2020.

Shares of our Common Stock that will be outstanding after this offering is based on 1,337,067 shares of Common Stock outstanding as of April 17, 2020, but excludes (a) shares of Common Stock to be issued upon exercise of warrants and pre-funded warrants to purchase an aggregate of up to 703,099 shares of Common Stock as of April 17, 2020, (b) up to an aggregate of 408,000 shares of Common Stock issuable upon conversion of the March 2020 Note (assuming full conversion of the March 2020 Note using a conversion price equal to the Variable Conversion Price (as hereinafter defined)) (c) up to an aggregate of 1,226,415 shares of Common Stock underlying the Warrants to be issued in this offering (assuming no sale of any Pre-Funded Warrants and no exercise of the underwriter's over-allotment option), (d) up to an aggregate of 61,320 shares of Common Stock underlying the Underwriters' Warrants, (e) 705 shares of restricted stock to be released to a terminated employee in two equal tranches over the next 10 months pursuant to the terms of such employee's restricted stock agreement, (f) 20,000 unvested deferred shares (the "Deferred Shares") under our 2018 Long-Term Stock Incentive Plan (the "LTIP"), issued to Michael Howse, a member of our Board, pursuant to a Deferred Shares Agreement, entered into as of January 4, 2019 (the "Deferred Shares Agreement"), and (g) 12,500 shares of Common Stock issuable upon conversion of 250,000 shares of our Series A 8% Senior Convertible Preferred Stock (the "Series A Preferred Stock") issued to Lisa Walsh on April 18, 2019.

## RISK FACTORS

*Investing in our securities involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before deciding whether to purchase shares of our securities. If any of the following risks is realized, our business, operating results, financial condition and prospects could be materially and adversely affected. In that event, the price of our Common Stock could decline, and you could lose part or all of your investment.*

### **Risks Related to Our Business and Industry**

#### ***We have incurred losses since inception.***

We have had net losses for several years, since inception, and had an accumulated deficit of approximately \$187.7 million as of December 31, 2019, which includes our net losses of approximately \$12,038,000 for the year ended December 31, 2019, as compared to approximately \$67,357,000 for the year ended December 31, 2018. If we are unsuccessful in implementing any initiatives to improve our revenues in order to achieve profitability, it will have a material adverse impact on our business, prospects, operating results and financial condition. There can be no assurance that the revenue that we generate will be able to support our operations or meet our working capital needs.

#### ***Our independent registered public accounting firm's report contains an explanatory paragraph that expresses substantial doubt about our ability to continue as a going concern.***

Our independent registered public accounting firm has included in its report for the year ended December 31, 2019 an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern. Our consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the discharge of liabilities in the normal course of business. We have incurred net losses each year since inception, including approximately an additional \$12,038,000 of net loss during the year ended December 31, 2019. Our ability to continue as a going concern is contingent upon, other factors, our ability to raise additional capital through sales of our securities, including this offering, and incurrence of debt. Additionally, future capital requirements will depend on many factors, including the rate of revenue growth, the selling price of our products, the expansion of sales and marketing activities, the timing and extent of spending on research and development efforts and the continuing market acceptance of our products. These factors raise substantial doubt about our ability to continue as a going concern. There is no assurance that additional financing will be available at terms acceptable to us or at all. If we cannot continue as a viable entity, you may lose some or all of your investment in this offering.

#### ***Loss of key customers.***

A small number of our customers represent a significant percentage of our revenue. Although we may have agreements with these customers, these agreements typically do not require any minimum purchases and do not prohibit customers from using competing technologies or customers from purchasing products and services from competitors. Because many of our markets are rapidly evolving, customer demand for our technologies and products can shift quickly. As of December 31, 2019, three customers accounted for 37%, 28% and 20% of accounts receivable. Sales to Guo Guang Electric Co., a Chinese original device manufacturer that builds product for large consumer electronic companies, represented 57% of our revenue for the year ended December 31, 2019 and Bang & Olufsen, a Danish consumer electronic company, represented 24% of our revenue for the year ended December 31, 2019.

#### ***Reliance on module manufacturers.***

Our revenue from the sale of modules to consumer electronics and speaker companies depends in large part upon the availability of our modules that implement our technologies. Our manufacturers incorporate our technologies into these modules, which are then incorporated in consumer entertainment products. We do not manufacture these modules, but rather depend on manufacturers to produce the modules which we then sell to our customers. We do not control the manufacturers. While we have a longstanding relationship with our manufacturers, there can be no assurance that our manufacturers will continue to timely produce our modules. Change in management of our manufacturers or a change in their operations could negatively affect our production and cause us to seek other manufacturers which we may not be able to obtain on the same or similar terms as our current manufacturers. This could have a negative effect on our operations.

***We currently rely on semiconductor manufacturers to manufacture our semiconductors, and our failure to manage our relationship with our semiconductor manufacturers successfully could negatively impact our business.***

We rely on a single contractor in Japan for the production of our transmit semiconductor chip and a single contractor in China for the production of our receive semiconductor chip. Our reliance on these semiconductor manufacturers reduces our control over the manufacturing process, exposing us to risks, including increase production costs and reduced product supply. If we fail to manage our relationships with these manufacturers effectively, or if a contract manufacturer experiences delays, disruptions, or decides to end-of-life the components that it manufactures for us, our ability to ship products to our end-user customers could be impaired and our competitive position and reputation could be harmed. In addition, any adverse change in our manufacturers' financial or business condition could disrupt our ability to supply quality products to our end-user customers. If we are required to change manufacturers, we may lose revenue, incur increased costs and damage our customer relationships. In addition, qualifying a new semiconductor manufacturer and commencing production can be an expensive and lengthy process. As a result of any of these aforementioned disruptions, we would experience a delay in our order fulfillment, and our business, operating results and financial condition would be adversely affected.

***We face risks related to health epidemics and other outbreaks, which could significantly disrupt our operations and could have a material adverse impact on us, and the recent coronavirus outbreak could materially and adversely affect our business.***

An outbreak of a new respiratory illness caused by coronavirus disease 2019 ("COVID-19") has resulted in millions of infections and hundreds of thousands of deaths worldwide, as of the date of filing of this prospectus, and continues to spread across the globe, including to the United States and Europe, the major markets in which we operate. The outbreak of COVID-19 or by other epidemics could materially and adversely affect our business, financial condition and results of operations. If the coronavirus worsens in China, the United States and Europe, or in other regions in which we have material operations or sales, our business activities originating from affected areas, including sales, manufacturing and supply chain related activities, could be adversely affected. Disruptive activities could include the temporary closure of our manufacturing facilities and those used in our supply chain processes, restrictions on the export or shipment of our products, significant cutback of ocean container delivery from China, business closures in impacted areas, and restrictions on our employees' and consultants' ability to travel and to meet with customers. The extent to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of the virus and the actions to contain it or treat its impact, among others. COVID-19 could also result in social, economic and labor instability in the countries in which we or our customers and suppliers operate.

If workers at one or more of our offices or the offices of our suppliers or manufacturers become ill or are quarantined and in either or both events are therefore unable to work, our operations could be subject to disruption. Further, if our manufacturers become unable to obtain necessary raw materials or components, we may incur higher supply costs or our manufacturers may be required to reduce production levels, either of which may negatively affect our financial condition or results of operations. The extent to which COVID-19 affects our results will depend on future developments that are highly uncertain and cannot be predicted, including actions to contain COVID-19 or treat its effect, among others.

***Declines in or problems with the WiSA Association membership could negatively affect our reputation.***

We rely significantly on the members of our wholly-owned subsidiary, WiSA, LLC, to uphold the standards and criteria of interoperable audio products. If we lose members or new technology is developed that is easier to incorporate than ours, the WiSA Association may fail to maintain its active status and the sales of our modules could diminish as well. In addition, failure of our members to adhere to our policies designed to provide interoperability between audio systems could undermine the integrity of our brand.

***Failure to stay on top of technology innovation could harm our business model.***

Our revenue growth will depend upon our success in new and existing markets for our technologies. The markets for our technologies and products are defined by:

- rapid technological change;
- new and improved technology and frequent product introductions;
- changing consumer demands;
- evolving industry standards; and
- technology and product obsolescence.

Our future success depends on our ability to enhance our technologies and products and to develop new technologies and products that address the market needs in a timely manner. Technology development is a complex, uncertain process requiring high levels of innovation, highly-skilled engineering and development personnel, and the accurate anticipation of technological and market trends. We may not be able to identify, develop, acquire, market, or support new or enhanced technologies or products on a timely basis, if at all.

***Economic uncertainties or downturns, or political changes, could limit the availability of funds available to our customers and potential customers, which could materially adversely affect our business.***

Current or future economic uncertainties or downturns could adversely affect our business and operating results. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, financial and credit market fluctuations, political deadlock, natural catastrophes, warfare and terrorist attacks on the United States, Europe, the Asia Pacific region or elsewhere, could cause a decrease in funds available to our customers and potential customers and negatively affect the rate of growth of our business.

General worldwide economic uncertainty and political changes in the United States and elsewhere could impact our business. Such conditions may make it extremely difficult for our customers and us to forecast and plan future budgetary decisions or business activities accurately, and they could cause our customers to reevaluate their decisions to purchase our solutions, which could delay and lengthen our sales cycles or result in cancellations of planned purchases. Furthermore, during challenging economic times or as a result of political changes, our customers may tighten their budgets and face constraints in gaining timely access to sufficient funding or other credit, which could result in an impairment of their ability to make timely payments to us. In turn, we may be required to increase our allowance for doubtful accounts, which would adversely affect our financial results.

We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular industry, or the impact of political changes. If the economic conditions of the general economy or industries in which we operate worsen from present levels, or if recent political changes result in less funding being available to purchase our solutions, our business, operating results, financial condition and cash flows could be adversely affected.

***A decline in discretionary consumer spending may adversely affect our industry, our operations and ultimately our profitability.***

Luxury products, such as speaker systems, TVs, game consoles and PCs, are discretionary purchases for consumers. Any reduction in consumer discretionary spending or disposable income may affect our industry significantly. Many economic factors outside of our control could affect consumer discretionary spending, including the financial markets, consumer credit availability, prevailing interest rates, energy costs, employment levels, salary levels, and tax rates. Any reduction in discretionary consumer spending could materially adversely affect our business and financial condition.

***Consumer spending weakness could impact our revenue.***

Weakness in general economic conditions may suppress consumer demand in our markets. Many of the products in which our technologies are incorporated are discretionary goods, such as home-theater systems. Weakness in general economic conditions may also lead to customers becoming delinquent on their obligations to us or being unable to pay, resulting in a higher level of write-offs. Economic conditions may impact the amount businesses spend on their speaker systems. Weakness in economic conditions could lessen demand for our products and negatively affect our revenue.

***We face intense competition in our industry, and we may not be able to compete successfully in our target markets.***

The digital audio, consumer electronics and entertainment markets are characterized by intense competition, subject to rapid change, and are significantly affected by new product introductions and other market activities of industry participants. Our competitors include many large domestic and international companies that have substantially greater financial, technical, marketing, distribution and other resources, greater name recognition, a longer operating history, broader product lines, lower cost structures and longer-standing relationships with customers and suppliers than we do. As a result, our competitors may be able to respond better to new or emerging technologies or standards and to changes in customer requirements.

Further, some of our competitors are in a better financial and marketing position from which to influence industry acceptance of a particular product standard or a competing technology than we are. Our competitors may also be able to devote greater resources to the development, promotion and sale of products, and may be in a position to deliver competitive products at a lower price than we can, along with the potential to conduct strategic acquisitions, joint ventures, subsidies and lobbying industry and government standards, hire more experienced technicians, engineers and research and development teams than we can. As a result, we may not be able to compete effectively against any of these organizations.

Our ability to compete in our current target markets and future markets will depend in large part on our ability to successfully develop, introduce and sell new and enhanced products or technologies on a timely and cost-effective basis and to respond to changing market requirements. We expect our competitors to continue to improve the performance of their current products and potentially reduce their prices. In addition, our competitors may develop future generations and enhancements of competitive products or new or enhanced technologies that may offer greater performance and improved pricing or render our technologies obsolete. If we are unable to match or exceed the improvements made by our competitors, our market position and prospects could deteriorate and our net product sales could decline.

***Failure to effectively develop and expand our sales and marketing capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our modules.***

To increase total customers and customer recognition of the WiSA Association products and to achieve broader market acceptance of our technology, we will need to expand our sales and marketing organization and increase our business development resources, including the vertical and geographic distribution of our sales force and our teams of account executives focused on new accounts and responsible for renewal and growth of existing accounts.

Our business requires that our sales personnel have particular expertise and experience in interoperability of audio systems, and the latest wireless audio technology. We may not achieve revenue growth from expanding our sales force if we are unable to hire, develop and retain talented sales personnel with appropriate experience, if our new sales personnel are unable to achieve desired productivity levels in a reasonable period of time or if our sales and marketing programs are not effective.

***Interruptions or performance problems associated with technology and wireless technology outside of our control may adversely affect our business and results of operations.***

We may in the future experience performance issues due to a variety of factors, including wireless technology disruptions, human or software errors. If a wireless connection is compromised, our products will not work as designed and our business could be negatively affected. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time or a connection problem may be out of our control and could deter customers from purchasing wireless audio components.

We expect to continue to make significant investments to maintain and improve the performance of our modules. To the extent that we do not effectively address capacity constraints, upgrade our systems as needed and continually develop our technology to accommodate actual and anticipated changes in technology, our business, operating results and financial condition may be adversely affected.

***Real or perceived errors, failures or bugs in our modules could adversely affect our operating results and growth prospects.***

Because our modules are complex, undetected errors, failures or bugs may occur. Our module is installed and used in numerous audio systems of different brands with different operating systems, system management software, and equipment and networking configurations, which may cause errors or failures of our technology. Despite our testing, errors, failures or bugs may not be found in our modules until it is released to our customers. Moreover, our customers could incorrectly implement or inadvertently misuse our modules, which could result in customer dissatisfaction and adversely impact the perceived quality or utility of our products as well as our brand.

Any of these real or perceived errors, compatibility issues, failures or bugs in our modules could result in negative publicity, reputational harm, loss of competitive position or claims by customers for losses sustained by them. In such an event, we may be required, or may choose, for customer relations or other reasons, to expend additional resources in order to correct the problem. Alleviating any of these problems could require significant expenditures of our capital and other resources and could cause interruptions or delays in the use of our solutions, which could cause us to lose existing or potential customers and could adversely affect our operating results and growth prospects.

***We rely on the cooperation of our customers to install our modules in their audio products.***

Our modules are sold to our customers who are consumer electronics companies. Our customers install the modules into their products. Our customers' audio products are sold to the general public who must then install the audio system into their homes or businesses. We do not oversee installation of our products and therefore have no control over the end result. If a module is not installed correctly in a customer product or an end consumer does not install their audio system correctly, our technology may not work properly, which could result in customer dissatisfaction or have a material adverse impact on our reputation, our business and our financial results.

***If we do not or cannot maintain cutting edge technology and compatibility of our modules with products that our customers use, our business could suffer.***

Our customers integrate our modules into their products. The functionality and popularity of our technology depends, in part, on our ability to produce modules that integrate into our customers' products. Our customers may change the features of their technologies and audio systems as a whole may advance technologically. Such changes could functionally limit or terminate the utility of our product, which could negatively impact our customer service and harm our business. If we fail to maintain cutting edge technology and compatibility with the products our customers produce, we may not be able to offer the functionality that our customers need, and our customers may not purchase our modules, which would negatively impact our ability to generate revenue and have a material adverse impact on our business.

***Our future quarterly results of operations may fluctuate significantly due to a wide range of factors, which makes our future results difficult to predict.***

Our revenues and results of operations could vary significantly from quarter to quarter as a result of various factors, many of which are outside of our control, including:

- the expansion of our customer base;
- the renewal of agreements with, and expansion of coverage by, existing customers;
- the size, timing and terms of our sales to both existing and new customers;
- the introduction of products or services that may compete with us for the limited funds available to our customers, and changes in the cost of such products or services;
- changes in our customers' and potential customers' budgets;
- our ability to control costs, including our operating expenses;
- our ability to hire, train and maintain our direct sales force, engineers, and marketing employees;
- the timing of satisfying revenue recognition criteria in connection with initial deployment and renewals; and
- general economic and political conditions, both domestically and internationally.

Any one of these or other factors discussed elsewhere in this prospectus may result in fluctuations in our revenues and operating results, meaning that quarter-to-quarter comparisons of our revenues, results of operations and cash flows may not necessarily be indicative of our future performance.

Because of the fluctuations described above, our ability to forecast revenues is limited and we may not be able to accurately predict our future revenues or results of operations. In addition, we base our current and future expense levels on our operating plans and sales forecasts, and our operating expenses are expected to be relatively fixed in the short term. Accordingly, we may not be able to reduce our costs sufficiently to compensate for an unexpected shortfall in revenues, and even a small shortfall in revenues could disproportionately and adversely affect our financial results for that quarter. The variability and unpredictability of these and other factors could result in our failing to meet or exceed financial expectations for a given period.

***Our sales are subject to fluctuation as a result of seasonality, which is outside of our control.***

Our sales are subject to the seasonality of when consumers buy electronic products, generally in the third quarter leading up to the year-end holiday season. Our customers' plans to complete and ship new products to meet this seasonal peak can critically impact our financial results should they miss the holiday season. As a result of these factors, our financial results for any single quarter or for periods of less than a year are not necessarily indicative of the results that may be achieved for a full fiscal year.

***Our sales are subject to fluctuation as a result of our customers' new product introduction timelines and end-user adoption of our customers' retail products, both of which are outside of our control.***

We, in conjunction with our customers, are launching a new technology to the retail and consumer market. The consumer adoption rate at retail is a critical component of our financial success and is currently an unknown component of our financial plans. The variability and unpredictability of these and other factors could result in our failing to meet or exceed financial expectations for a given period. As a result of these factors, our financial results for any single quarter or for periods of less than a year are not necessarily indicative of the results that may be achieved for a full fiscal year.

***We conduct international operations, which exposes us to significant risks.***

We have offices in California and Oregon, but we also have employees in Taiwan and representatives in China, Japan and the Republic of Korea. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic and political risks in addition to those we already face in the United States. In addition, we invest time and resources in understanding the regulatory framework and political environments of our customers overseas in order to focus our sales efforts. Because such regulatory and political considerations are likely to vary across jurisdictions, this effort requires additional time and attention from our sales team and could lead to a sales cycle that is longer than our typical process for sales in the United States. We also may need to hire additional employees and otherwise invest in our international operations in order to reach new customers. Because of our limited experience with international operations as well as developing and managing sales in international markets, our international efforts may not be successful.

In addition, we will face risks in doing business internationally that could adversely affect our business, including:

- the potential impact of currency exchange fluctuations;
- the difficulty of staffing and managing international operations and the increased operations, travel, shipping and compliance costs associated with having customers in numerous international locations;
- potentially greater difficulty collecting accounts receivable and longer payment cycles;
- the need to offer customer support in various languages;
- challenges in understanding and complying with local laws, regulations and customs in foreign jurisdictions;
- export controls and economic sanctions administered by the Department of Commerce Bureau of Industry and Security and the Treasury Department's Office of Foreign Assets Control;

- compliance with various anti-bribery and anti-corruption laws such as the Foreign Corrupt Practices Act and United Kingdom Bribery Act of 2010;
- tariffs and other non-tariff barriers, such as quotas and local content rules;
- more limited protection for our IP in some countries;
- adverse or uncertain tax consequences as a result of international operations;
- currency control regulations, which might restrict or prohibit our conversion of other currencies into U.S. dollars;
- restrictions on the transfer of funds;
- deterioration of political relations between the United States and other countries; and
- political or social unrest or economic instability in a specific country or region in which we operate, which could have an adverse impact on our operations in that location.

Also, we expect that due to costs related to our international efforts and the increased cost of doing business internationally, we will incur higher costs to secure sales to international customers than the comparable costs for domestic customers. As a result, our financial results may fluctuate as we expand our operations and customer base worldwide.

Our failure to manage any of these risks successfully could harm our international operations and adversely affect our business, operating results and financial condition.

***We are dependent on the continued services and performance of our senior management and other key personnel, the loss of any of whom could adversely affect our business.***

Our future success depends in large part on the continued contributions of our senior management and other key personnel. In particular, the leadership of key management personnel is critical to the successful management of our Company, the development of our products, and our strategic direction. We also depend on the contributions of key technical personnel.

We do not maintain “key person” insurance for any member of our senior management team or any of our other key employees. Our senior management and key personnel are all employed on an at-will basis, which means that they could terminate their employment with us at any time, for any reason and without notice. The loss of any of our key management personnel could significantly delay or prevent the achievement of our development and strategic objectives and adversely affect our business.

***If we are unable to attract, integrate and retain additional qualified personnel, including top technical talent, our business could be adversely affected.***

Our future success depends in part on our ability to identify, attract, integrate and retain highly skilled technical, managerial, sales and other personnel. We face intense competition for qualified individuals from numerous other companies, including other software and technology companies, many of whom have greater financial and other resources than we do. Some of these characteristics may be more appealing to high-quality candidates than those we have to offer. In addition, new hires often require significant training and, in many cases, take significant time before they achieve full productivity. We may incur significant costs to attract and retain qualified personnel, including significant expenditures related to salaries and benefits and compensation expenses related to equity awards, and we may lose new employees to our competitors or other companies before we realize the benefit of our investment in recruiting and training them. Moreover, new employees may not be or become as productive as we expect, as we may face challenges in adequately or appropriately integrating them into our workforce and culture. If we are unable to attract, integrate and retain suitably qualified individuals who are capable of meeting our growing technical, operational and managerial requirements, on a timely basis or at all, our business will be adversely affected.

Volatility or lack of positive performance in our share price may also affect our ability to attract and retain our key employees. Many of our senior management personnel and other key employees have become, or will soon become, vested in a substantial amount of Common Stock or warrants to purchase Common Stock. Employees may be more likely to leave us if the shares they own or the shares underlying their vested warrants have significantly appreciated in value relative to the original purchase prices of the shares or the exercise prices of the warrants, or, conversely, if the exercise prices of the warrants that they hold are significantly above the market price of our Common Stock. If we are unable to appropriately incentivize and retain our employees through equity compensation, or if we need to increase our compensation expenses in order to appropriately incentivize and retain our employees, our business, operating results and financial condition would be adversely affected.

***We may be subject to litigation for a variety of claims, which could adversely affect our results of operations, harm our reputation or otherwise negatively impact our business.***

We may be subject to litigation for a variety of claims arising from our normal business activities. These may include claims, suits, and proceedings involving labor and employment, wage and hour, commercial and other matters. The outcome of any litigation, regardless of its merits, is inherently uncertain. Any claims and lawsuits, and the disposition of such claims and lawsuits, could be time-consuming and expensive to resolve, divert management attention and resources, and lead to attempts on the part of other parties to pursue similar claims. Any adverse determination related to litigation could adversely affect our results of operations, harm our reputation or otherwise negatively impact our business. In addition, depending on the nature and timing of any such dispute, a resolution of a legal matter could materially affect our future operating results, our cash flows or both.

***Changes in financial accounting standards may cause adverse and unexpected revenue fluctuations and impact our reported results of operations.***

A change in accounting standards or practices could harm our operating results and may even affect our reporting of transactions completed before the change is effective. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may harm our operating results or the way we conduct our business.

***We entered into a purchase order with a company in which one of our directors is an executive officer, the fulfillment of which could cause such director to no longer be independent.***

In August 2019, we issued a \$360,000 purchase order to Hansong Technology, a company in which our director, Helge Kristensen, serves as a vice president. Pursuant to this purchase order, we will pay \$360,000 to Hansong Technology for the purchase of certain products. Additionally, Hansong Technology purchased \$63,523 of our modules pursuant to purchase orders issued in 2019, with \$22,923 received by us in 2019 and the remaining amount expected to be received in 2020. Under Nasdaq's corporate governance rules, our Board must be composed of a majority of "independent directors." Additionally, subject to certain limited exceptions, our audit, compensation, and nominating and corporate governance committees also must be composed of all independent directors. Upon our payment to Hansong Technology, it is very likely that Mr. Kristensen would no longer meet the qualifications of an "independent director," in which case our Board would no longer be composed of a majority of "independent directors" nor would our committees be composed of all "independent directors." In such event we would be required to take such actions, as necessary, to regain compliance with the independence requirements under the Nasdaq rules, in order to avoid being delisted.

## Risks Related to Our IP

### *Failure to protect our IP rights could adversely affect our business.*

Our success depends, in part, on our ability to protect proprietary methods and technologies that we develop or license under patent and other IP laws of the United States, so that we can prevent others from using our inventions and proprietary information. If we fail to protect our IP rights adequately, our competitors might gain access to our technology, and our business might be adversely affected. However, defending our IP rights might entail significant expenses. Any of our patent rights, copyrights, trademarks or other IP rights may be challenged by others, weakened or invalidated through administrative process or litigation.

As of April 17, 2020, we had 9 issued and 6 pending U.S. patents covering our technology. We have three patent applications pending for examination outside of the United States. We also license issued U.S. patents from others. The patents that we own or license from others (including those that may be issued in the future) may not provide us with any competitive advantages or may be challenged by third parties, and our patent applications may never be granted.

Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Even if issued, there can be no assurance that these patents will adequately protect our IP, as the legal standards relating to the validity, enforceability and scope of protection of patent and other IP rights are uncertain.

Any patents that are issued may subsequently be invalidated or otherwise limited, allowing other companies to develop offerings that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition. In addition, issuance of a patent does not guarantee that we have a right to practice the patented invention. Patent applications in the United States are typically not published until 18 months after filing or, in some cases, not at all, and publications of discoveries in industry-related literature lag behind actual discoveries. We cannot be certain that third parties do not have blocking patents that could be used to prevent us from marketing or practicing our patented software or technology.

Effective patent, trademark, copyright and trade secret protection may not be available to us in every country in which our software is available. The laws of some foreign countries may not be as protective of IP rights as those in the United States (in particular, some foreign jurisdictions do not permit patent protection for software), and mechanisms for enforcement of IP rights may be inadequate. Additional uncertainty may result from changes to IP legislation enacted in the United States, including the recent America Invents Act, and other national governments and from interpretations of the IP laws of the United States and other countries by applicable courts and agencies. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our IP.

We rely in part on trade secrets, proprietary know-how and other confidential information to maintain our competitive position. Although we endeavor to enter into non-disclosure agreements with our employees, licensees and others who may have access to this information, we cannot assure you that these agreements or other steps we have taken will prevent unauthorized use, disclosure or reverse engineering of our technology. Moreover, third parties may independently develop technologies or products that compete with ours, and we may be unable to prevent this competition.

We might be required to spend significant resources to monitor and protect our IP rights. We may initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, we may provoke third parties to assert counterclaims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially viable. Any litigation, whether or not resolved in our favor, could result in significant expense to us and divert the efforts of our technical and management personnel, which may adversely affect our business, operating results, financial condition and cash flows.

***We may be subject to IP rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages and could limit our ability to use certain technologies.***

Companies in the software and technology industries, including some of our current and potential competitors, own large numbers of patents, copyrights, trademarks and trade secrets and frequently enter into litigation based on allegations of infringement or other violations of IP rights. In addition, many of these companies have the capability to dedicate substantially greater resources to enforce their IP rights and to defend claims that may be brought against them. The litigation may involve patent holding companies or other adverse patent owners that have no relevant product revenues and against which our patents may therefore provide little or no deterrence. We have received, and may in the future receive, notices that claim we have misappropriated, misused, or infringed other parties' IP rights, and, to the extent we gain greater market visibility, we face a higher risk of being the subject of IP infringement claims.

There may be third-party IP rights, including issued or pending patents that cover significant aspects of our technologies or business methods. Any IP claims, with or without merit, could be very time-consuming, could be expensive to settle or litigate and could divert our management's attention and other resources. These claims could also subject us to significant liability for damages, potentially including treble damages if we are found to have willfully infringed patents or copyrights. These claims could also result in our having to stop using technology found to be in violation of a third party's rights. We might be required to seek a license for the IP, which may not be available on reasonable terms or at all. Even if a license were available, we could be required to pay significant royalties, which would increase our operating expenses. As a result, we may be required to develop alternative non-infringing technology, which could require significant effort and expense. If we cannot license or develop technology for any infringing aspect of our business, we would be forced to limit or stop sales of our software and may be unable to compete effectively. Any of these results would adversely affect our business, operating results, financial condition and cash flows.

#### **Risks Related to this Offering and Ownership of Our Common Stock**

***We may become subject to litigation in connection with an alleged breach of the Alexander Engagement Agreement as a result of conducting the March 2020 Private Placement.***

On April 3, 2020, we received a letter (the "April 3<sup>rd</sup> Alexander Counsel Letter") from counsel for Alexander Capital, L.P. ("Alexander"), alleging that we were in apparent breach of our engagement agreement, dated February 6, 2020, that we entered into with Alexander (the "Alexander Engagement Agreement"), which appointed Alexander as our exclusive placement agent and financial advisor, due to our consummation of the March 2020 Private Placement, in which Maxim acted as placement agent. Such letter also claims that due to such alleged breach, and in accordance with the terms of the Alexander Engagement Agreement, we owed Alexander an aggregate of \$170,000 and warrants to purchase up to 22,768 shares of Common Stock in connection with the March 2020 Private Placement. The April 3<sup>rd</sup> Alexander Counsel Letter further states that in an effort to avoid needless time and effort involved in resolving the dispute, that Alexander was willing to forego any claim to the issuance of warrants to it and to settle the dispute in consideration of our payment of \$170,000.

On April 10, 2020, we received a second letter (the "April 10<sup>th</sup> Alexander Counsel Letter"), from Alexander's counsel, responding to our April 7<sup>th</sup> letter. The April 10<sup>th</sup> Alexander Counsel Letter (i) disputes all of our arguments relating to the termination of the Alexander Engagement Agreement; (ii) appears, by implication, to withdraw the Alexander Settlement Offer offered in the April 3<sup>rd</sup> Alexander Counsel Letter to settle Alexander's claim against us; and (iii) makes specific reference to the engagement of Maxim as underwriter, in connection with this offering, claims that such engagement is a further breach of the Alexander Engagement Agreement and states that Alexander believes that it would be entitled to seek further damages for breach, as a result thereof. Additionally, there is language in the April 10<sup>th</sup> Alexander Counsel Letter stating that if we had engaged Maxim prior to closing a financing on February 28, 2020 in which Alexander was placement agent, without disclosing our prior engagement of Maxim to investors in that financing, that this would raise additional issues. Finally, Alexander has demanded that we cease this offering immediately and that if we proceed with this offering, it will seek to be compensated as if it had acted as underwriter in this offering. On April 16, 2020, we received a third letter from Alexander's counsel that Alexander intends to file an action in connection with such claims.

We believe that such allegations are without merit and intend to vigorously dispute Alexander's allegations that we are in breach of Alexander Engagement Agreement. We continue to engage in discussions with Alexander and its counsel regarding such alleged breaches claimed by Alexander, including, without limitation, any alleged breaches relating to this offering, and alleged compensation owed, however we cannot predict whether such discussions will result in the filing of any action against us or the entering into of any settlement agreements between us and Alexander, the timing of any such agreements, or the terms thereof. In the event that Alexander initiates any legal proceedings, we cannot assure you that they will be resolved in our favor. Any lawsuit may result in significant expenses and may be expected to continue to be a diversion of our management's time and other resources into the future, which could adversely affect our business. If we were required to pay Alexander significant damages in connection with its claims, including, without limitation, compensation in connection with this offering, it could have a material adverse effect on our business, operating results and financial condition.

***We have been notified by Nasdaq of our failure to comply with certain continued listing requirements and if we are unable to regain compliance with all applicable continued listing requirements and standards of Nasdaq, our Common Stock could be delisted from Nasdaq.***

Our Common Stock is currently listed on Nasdaq. In order to maintain that listing, we must satisfy minimum financial and other continued listing requirements and standards, including those regarding director independence and independent committee requirements, minimum stockholders' equity, minimum share price, and certain corporate governance requirements. There can be no assurances that we will be able to comply with the applicable listing standards.

In the event that our Common Stock is delisted from Nasdaq and is not eligible for quotation on another market or exchange, trading of our common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our Common Stock, and it would likely be more difficult to obtain coverage by securities analysts and the news media, which could cause the price of our Common Stock to decline further. Also, it may be difficult for us to raise additional capital if we are not listed on a national exchange.

On October 16, 2019, we were officially notified by Nasdaq that the bid price of our Common Stock had failed to satisfy the Minimum Bid Price Requirement and in accordance with Nasdaq's Listing Rules, we were granted a 180-calendar day compliance period, or until April 13, 2020, to regain compliance with the Minimum Bid Price Requirement. To regain compliance, the closing bid price of our shares of Common Stock would have had to meet or exceed \$1.00 per share for at least ten (10) consecutive business days during the 180-calendar day grace period. During such compliance period, our shares of Common Stock continued to be listed and traded on the Nasdaq Capital Market, however, the closing bid price of our Common Stock has not satisfied this requirement because it will not have met or exceeded \$1.00 per share for at least ten (10) consecutive business days during such period. As a result, we expect to receive a delisting notice from Nasdaq stating that Nasdaq will initiate proceedings to delist our Common Stock due to our failure to comply with the Minimum Bid Price Requirement within such compliance period, but that we may appeal such delisting determination and may be afforded a second 180-calendar day grace period. To qualify for such second grace period, we would be required to meet the continued listing requirement for market value of publicly held shares and all other Nasdaq listing standards, with the exception of the Minimum Bid Price Requirement. In order to regain compliance with the Minimum Bid Price Requirement, we held a special meeting of our stockholders on March 31, 2020 who approved an amendment to our certificate of incorporation, as amended, to effect a reverse stock split of all of the outstanding shares of our Common Stock at a specific ratio within a range from one-for-four to one-for-twenty, and to grant authorization to the Board to determine, in its sole discretion, the specific ratio and timing of the reverse stock split. In order to maintain compliance with Nasdaq listing requirements discussed above, our Board utilized this authority and authorized a reverse stock split ratio of one-for-twenty, effective for trading on April 9, 2020. We believe that such reverse stock split will have a positive impact on our ability to cure such minimum bid price deficiency. However, there can be no assurance that such an amendment to effect the reverse stock split will have the desired effect of sufficiently increasing the bid price of our Common Stock for any period required by Nasdaq or that if it does, it will continue to satisfy the Bid Minimum Price Requirement at any time in the future. On April 17, 2020, the SEC approved Nasdaq's proposed change to certain of its listing rules, including the Minimum Bid Price Requirement, which extends the period of time in which Nasdaq-listed companies are required to regain compliance with such rules by

tolling such compliance periods to June 30, 2020. As of the date of this prospectus, we have not received any communications from Nasdaq regarding our compliance with the Minimum Bid Price Requirement. Additionally, even if we are able to satisfy the Minimum Bid Price Requirement as a result of such reverse stock split, there can be no assurance that we will be able to comply with Nasdaq's other listing standard, including the Stockholders' Equity Requirement (as defined below) or the Audit Committee Rule (as defined below), with which we are currently not in compliance.

On November 18, 2019, we were officially notified by Nasdaq that we did not comply with Listing Rule 5550(b) (the “Rule”), which requires a minimum \$2,500,000 stockholders’ equity (the “Stockholders’ Equity Requirement”), among other listing criteria. We were required to submit to Nasdaq a plan to regain compliance with the Stockholders’ Equity Requirement for consideration by the Nasdaq Listing Qualifications staff (“Nasdaq Staff”) by no later than January 2, 2020. On January 2, 2020, we submitted a plan to regain compliance (the “Compliance Plan”) to the Nasdaq Staff. On March 23, 2020, the Nasdaq Staff accepted the Compliance Plan and granted us an extension period pursuant to which we must regain compliance with the Rule. Among other things, the terms of such extension include that we must complete an equity raise on or before May 18, 2020, and must publicly disclose on a Current Report on Form 8-K our prior non-compliance with the Rule and the terms of such equity raise enabling us to regain compliance with the Rule. Notwithstanding the terms of such extension period, if we fail to evidence compliance with the Rule upon the filing of our periodic report for the period ending June 30, 2020, the Nasdaq Staff will provide written notification that our Common Stock will be delisted from Nasdaq, however we may appeal such delisting determination to Nasdaq’s hearing panel.

On March 24, 2020, we were officially notified by Nasdaq that we did not comply with Listing Rule 5605 (the “Audit Committee Rule”), which requires that the audit committee of our Board include at least three independent directors. In accordance with Nasdaq’s Listing Rules, we have been granted a cure period in order to regain compliance with the Audit Committee Rule, which period ends on (i) the earlier of (x) our next annual stockholders’ meeting or (y) February 10, 2021 or (ii) if such annual stockholders’ meeting is held before August 10, 2020, then we must evidence compliance with the Audit Committee Rule no later than that date. If we fail to evidence compliance with the Audit Committee Rule upon such period’s end, the Nasdaq Staff will provide written notification that our Common Stock will be delisted from Nasdaq, however we may appeal such delisting determination to Nasdaq’s hearing panel.

In the event that we are delisted from Nasdaq, our Common Stock may lose liquidity, increase volatility, and lose market maker support. See “Prospectus Summary—Recent Developments” on page 7 of this prospectus regarding Nasdaq’s written notifications to the Company. There can be no assurances that we will be able to regain compliance with Nasdaq listing standards relating to the Minimum Bid Price Requirement, the Stockholders’ Equity Requirement or the Audit Committee Rule, or if we do later regain compliance with such Nasdaq listing standards, will be able to continue to comply with all such listing standards. If we are unable to maintain compliance with these Nasdaq requirements, our Common Stock will be delisted from Nasdaq, which may negatively impact the value of our securities.

***In the event that our Common Stock is delisted from Nasdaq, U.S. broker-dealers may be discouraged from effecting transactions in shares of our Common Stock because they may be considered penny stocks and thus be subject to the penny stock rules.***

The SEC has adopted a number of rules to regulate “penny stock” that restricts transactions involving stock which is deemed to be penny stock. Such rules include Rules 3a51-1, 15g-1, 15g-2, 15g-3, 15g-4, 15g-5, 15g-6, 15g-7, and 15g-9 under the Exchange Act. These rules may have the effect of reducing the liquidity of penny stocks. “Penny stocks” generally are equity securities with a price of less than \$5.00 per share (other than securities registered on certain national securities exchanges or quoted on Nasdaq if current price and volume information with respect to transactions in such securities is provided by the exchange or system). Our shares of Common Stock have in the past constituted, and may again in the future constitute, “penny stock” within the meaning of the rules. The additional sales practice and disclosure requirements imposed upon U.S. broker-dealers may discourage such broker-dealers from effecting transactions in shares of our Common Stock, which could severely limit the market liquidity of such shares of Common Stock and impede their sale in the secondary market.

A U.S. broker-dealer selling penny stock to anyone other than an established customer or “accredited investor” (generally, an individual with a net worth in excess of \$1,000,000 or an annual income exceeding \$200,000, or \$300,000 together with his or her spouse) must make a special suitability determination for the purchaser and must receive the purchaser’s written consent to the transaction prior to sale, unless the broker-dealer or the transaction is otherwise exempt. In addition, the “penny stock” regulations require the U.S. broker-dealer to deliver, prior to any transaction involving a “penny stock”, a disclosure schedule prepared in accordance with SEC standards relating to the “penny stock” market, unless the broker-dealer or the transaction is otherwise exempt. A U.S. broker-dealer is also required to disclose commissions payable to the U.S. broker-dealer and the registered representative and current quotations for the securities. Finally, a U.S. broker-dealer is required to submit monthly statements disclosing recent price information with respect to the “penny stock” held in a customer’s account and information with respect to the limited market in “penny stocks”.

Stockholders should be aware that, according to the SEC, the market for “penny stocks” has suffered in recent years from patterns of fraud and abuse. Such patterns include (i) control of the market for the security by one or a few broker-dealers that are often related to the promoter or issuer; (ii) manipulation of prices through prearranged matching of purchases and sales and false and misleading press releases; (iii) “boiler room” practices involving high-pressure sales tactics and unrealistic price projections by inexperienced sales persons; (iv) excessive and undisclosed bid-ask differentials and markups by selling broker-dealers; and (v) the wholesale dumping of the same securities by promoters and broker-dealers after prices have been manipulated to a desired level, resulting in investor losses. Our management is aware of the abuses that have occurred historically in the penny stock market. Although we do not expect to be in a position to dictate the behavior of the market or of broker-dealers who participate in the market, management will strive within the confines of practical limitations to prevent the described patterns from being established with respect to our securities.

***If we fail to make necessary improvements to address the material weakness in our internal control over financial reporting identified by our independent registered public accounting firm, we may not be able to report our financial results accurately and timely or prevent fraud, any of which could cause our reported financial results to be materially misstated and result in the loss of investor confidence or delisting and cause the trading price of our Common Stock to decline.***

Our independent registered public accounting firm has not conducted an audit of our internal control over financial reporting. However, in connection with the audits of our consolidated financial statements as of and for the years ended December 31, 2019 and 2018, our independent registered public accounting firm identified in their reports to our audit committee that we had material weaknesses in our internal control over financial reporting due to (i) insufficient written policies and procedures for accounting and financial reporting with respect to the requirements and application of both accounting principles generally accepted in the United States of America (“GAAP”) and SEC guidelines and (ii) inadequate segregation of duties. A material weakness is defined in the standards established by the Public Company Accounting Oversight Board (United States) as a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Our management and independent registered public accounting firm did not and was not required to perform an evaluation of our internal control over financial reporting as of and for the year ended December 31, 2018 in accordance with the provisions of the JOBS Act. As of the year ended December 31, 2019, our Chief Executive Officer and Chief Financial Officer performed such an evaluation and concluded that our disclosure controls and procedures were ineffective as of the end of such period, which conclusion was based on the fact that as of the year ended December 31, 2019, the Company had insufficient written policies and procedures for accounting and financial reporting with respect to the requirements and application of both GAAP and SEC guidelines. In connection with the audit of our consolidated financial statements as of and for the year ended December 31, 2019, our independent registered public accounting firm identified in their report to our audit committee that we had a material weakness in our internal control over financial reporting due to insufficient written policies and procedures for accounting and financial reporting with respect to the requirements and application of both GAAP and SEC guidelines.

If we fail to further increase and maintain the number and expertise of our staff for our accounting and finance functions and to improve and maintain internal control over financial reporting adequate 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 accurately and prevent fraud. In addition, we cannot be certain that any such steps we undertake will successfully remediate such material weakness or that other material weaknesses and control deficiencies will not be discovered in the future. If our remediation efforts are not successful or other material weaknesses or control deficiencies occur in the future, we may be unable to report our financial results accurately or on a timely basis, which could cause our reported financial results to be materially misstated and result in the loss of investor confidence or delisting and cause our stock price to decline. As a result of such failures, we could also become subject to investigations by Nasdaq, the SEC, or other regulatory authorities, and become subject to litigation from investors and stockholders, any of which could harm our reputation and financial condition and divert financial and management resources. Even if we are able to report our consolidated financial statements accurately and timely, if we do not make all the necessary improvements to address such material weakness, continued disclosure of our material weakness will be required in future filings with the SEC, which could reduce investor confidence in our reported results and cause our stock price to decline.

***Our executive officers, directors and principal stockholders own a significant percentage of our Common Stock and will be able to exert significant control over matters subject to stockholder approval.***

As of April 17, 2020, our directors, executive officers and holders of more than 5% of our equity securities, together with their affiliates, beneficially own 56% of our outstanding shares of Common Stock, and one of our stockholders beneficially owns over 23% of our outstanding shares of Common Stock. As a result, these stockholders have significant influence to determine the outcome of matters submitted to our stockholders for approval, including the ability to defeat the election of our directors, amend or prevent amendment of our certificate of incorporation, as amended, or bylaws or effect or prevent a change in corporate control, merger, consolidation, takeover or other business combination. In addition, any sale of a significant amount of our Common Stock held by our directors, executive officers and principal stockholders, or the possibility of such sales, could adversely affect the market price of our Common Stock. Management’s stock ownership may also discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of us, which in turn could reduce our stock price or prevent our stockholders from realizing any gains from our Common Stock.

***Substantial future sales of shares of our Common Stock could cause the market price of our Common Stock to decline.***

We expect that significant additional capital will be needed in the near future to continue our planned operations in the event that all of the shares of our Common Stock offered pursuant to this offering are not sold. Sales of a substantial number of shares of our Common Stock in the public market following the completion of this offering, or the perception that these sales might occur, could depress the market price of our Common Stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our Common Stock.

Moreover, after this offering, holders of approximately all of our warrants to purchase shares of Common Stock, including the holders of the shares offered in connection with this offering, the holder of the March 2020 Note and holders of 250,000 shares of our Series A Preferred Stock, or their respective transferees, will be entitled to specified rights with respect to the registration of the offer and sale of their respective shares of Common Stock underlying such securities under the Securities Act. Registration of the offer and sale of such shares of Common Stock under the Securities Act would result in such shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. We have also registered all shares of Common Stock that we may issue under our LTIP. If any such additional shares of Common Stock are sold, or if it is perceived that they will be sold, in the public market, the market price of our Common Stock could decline. See also “Description of Securities – Registration Rights.”

***Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.***

The public offering price of our Common Stock will be substantially higher than the pro forma net tangible book value per share of our Common Stock outstanding immediately following the completion of this offering. Therefore, if you purchase shares of Common Stock in this offering at an assumed public offering price of \$5.30 per share, assuming no issuance of any Pre-Funded Warrants in this offering, you will experience immediate and substantial dilution of \$2.64 per share, or approximately 50% of the public offering price of such shares, which is the difference between the price per share you pay for our Common Stock and our pro forma net tangible book value per share as of December 31, 2019, after giving effect to the issuance of shares of Common Stock in this offering. This dilution is due in large part to the fact that our earlier investors paid substantially less than the public offering price when they purchased shares of Common Stock. In addition, purchasers of the shares of Common Stock in this offering will have contributed approximately 5.6% of the aggregate price paid by all purchasers of our Common Stock and will own approximately 47.9% of our Common Stock outstanding after this offering.

Furthermore, you may experience further dilution to the extent that shares of our Common Stock are issued upon the exercise of outstanding warrants and pre-funded warrants and upon the conversion of the Note and outstanding shares of our Series A Preferred Stock. If we issue additional equity securities, employee stock grants vest, or there are any issuances and subsequent exercises of stock options issued in the future, you will experience additional dilution. Additional shares of our Common Stock may also be issued as follows (a) the exercise of warrants and pre-funded warrants to purchase an aggregate of 703,099 shares of Common Stock as of April 17, 2020, (b) up to an aggregate of 408,000 shares of Common Stock issuable upon conversion of the March 2020 Note (assuming full conversion of the March 2020 Note using a conversion price equal to the Variable Conversion Price (as defined below)), (c) the issuance of up to an aggregate of 1,226,415 shares of Common Stock underlying the Warrants to be issued in this offering (assuming no exercise of the underwriters’ over-allotment option), (d) the exercise of Underwriters’ Warrants to purchase up to an aggregate of 61,320 shares of Common Stock, (e) 705 shares of restricted stock to be released to a terminated employee in two equal tranches over the next 10 months pursuant to the terms of such employee’s restricted stock agreement, (f) 20,000 unvested deferred shares (the “Deferred Shares”) under LTIP, issued to Michael Howse, a member of our Board, pursuant to a Deferred Shares Agreement, entered into as of January 4, 2019 (the “Deferred Shares Agreement”), and (g) 12,500 shares of Common Stock issuable upon conversion of 250,000 shares of the Series A Preferred Stock issued to Lisa Walsh on April 18, 2019. Such warrants and pre-funded warrants have an average exercise price of \$35.81 and a weighted average years to maturity of approximately 3.72 years. The March 2020 Note is convertible into shares of Common Stock at the lesser of (x) 90% of the average of the five lowest daily VWAPs (as defined in the March 2020 Note) during the previous twenty trading days prior to the applicable conversion date (the “Variable Conversion Price”) and (y) \$6.40, subject to certain adjustments. In addition, such shares of Series A Preferred Stock are convertible into 12,500 shares of Common Stock at a price of \$80.00 per share, which is subject to adjustment under the Certificate of Designations of the Preferences, Rights and Limitations of the Series A Preferred Stock upon certain subsequent transactions and events described therein and which price cannot be reduced below \$30.00 (the “Certificate of Designations”). See “Certain Relationships and Related Party Transactions – Significant Stockholders”. Additionally, 124,704 shares of our Common Stock remain available for future issuance to our employees, directors and consultants pursuant to our LTIP, as of April 17, 2020. If our Board elects to issue additional restricted stock, stock options and/or other equity-based awards under the LTIP, our stockholders and investors in this offering may experience additional dilution, which could cause our Common Stock price to fall.

***We may seek to raise additional funds, finance acquisitions or develop strategic relationships by issuing securities that would dilute the ownership of the Common Stock. Depending on the terms available to us, if these activities result in significant dilution, it may negatively impact the trading price of our shares of Common Stock.***

We have financed our operations, and we expect to continue to finance our operations, acquisitions, if any, and the development of strategic relationships by issuing equity and/or convertible securities, which could significantly reduce the percentage ownership of our existing stockholders. Further, any additional financing that we secure may require the granting of rights, preferences or privileges senior to, or pari passu with, those of our Common Stock. Additionally, we may acquire other technologies or finance strategic alliances by issuing our equity or equity-linked securities, which may result in additional dilution. Any issuances by us of equity securities may be at or below the prevailing market price of our Common Stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our Common Stock to decline. We may also raise additional funds through the incurrence of debt or the issuance or sale of other securities or instruments senior to our shares of Common Stock. The holders of any securities or instruments we may issue may have rights superior to the rights of our common stockholders. If we experience dilution from issuance of additional securities and we grant superior rights to new securities over common stockholders, it may negatively impact the trading price of our shares of Common Stock.

***We could issue “blank check” preferred stock without stockholder approval with the effect of diluting then current stockholder interests and impairing their voting rights; and provisions in our charter documents could discourage a takeover that stockholders may consider favorable.***

Our certificate of incorporation, as amended, authorizes the issuance of up to 20,000,000 shares of “blank check” preferred stock with designations, rights and preferences as may be determined from time to time by our Board. 18,750,000 out of the 20,000,000 shares of preferred stock have not been designated. Our Board is empowered, without stockholder approval, to issue a series of preferred stock with dividend, liquidation, conversion, voting or other rights which could dilute the interest of, or impair the voting power of, our common stockholders. The issuance of a series of preferred stock could be used as a method of discouraging, delaying or preventing a change in control. For example, it would be possible for our Board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our Company.

***The market price for our Common Stock is particularly volatile given our status as a relatively unknown company with a small and thinly traded public float, and lack of profits, which could lead to wide fluctuations in our share price. You may be unable to sell your shares of Common Stock at or above your purchase price, which may result in substantial losses to you.***

The market for our Common Stock is characterized by significant price volatility when compared to the shares of larger, more established companies that have large public floats, and we expect that our share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in our share price is attributable to a number of factors. First, as noted above, our Common Stock is, compared to the shares of such larger, more established companies, sporadically and thinly traded. The price for our Common Stock could, for example, decline precipitously in the event that a large number of our Common Stock is sold on the market without commensurate demand. Secondly, we are a speculative or “risky” investment due to our lack of profits to date. As a consequence of this enhanced risk, more risk-averse investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares on the market more quickly and at greater discounts than would be the case with the stock of a larger, more established company that has a large public float. Many of these factors are beyond our control and may decrease the market price of our Common Stock regardless of our operating performance.

***If and when a larger trading market for our Common Stock develops, the market price of our Common Stock is still likely to be highly volatile and subject to wide fluctuations, and you may be unable to resell your shares at or above the price at which you acquired them.***

The market price of our Common Stock may be highly volatile and could be subject to wide fluctuations in response to a number of factors that are beyond our control, including, but not limited to:

- variations in our revenues and operating expenses;
- actual or anticipated changes in the estimates of our operating results or changes in stock market analyst recommendations regarding our Common Stock, other comparable companies or our industry generally;
- market conditions in our industry, the industries of our customers and the economy as a whole;
- actual or expected changes in our growth rates or our competitors’ growth rates;
- developments in the financial markets and worldwide or regional economies;
- announcements of innovations or new products or services by us or our competitors;
- announcements by the government relating to regulations that govern our industry;
- sales of our Common Stock or other securities by us or in the open market;
- changes in the market valuations of other comparable companies; and
- other events or factors, many of which are beyond our control, including those resulting from such events, or the prospect of such events, including war, terrorism and other international conflicts, public health issues including health epidemics or pandemics, such as the recent outbreak of the novel coronavirus (COVID-19), and natural disasters such as fire, hurricanes, earthquakes, tornados or other adverse weather and climate conditions, whether occurring in the United States or elsewhere, could disrupt our operations, disrupt the operations of our suppliers or result in political or economic instability.

In addition, if the market for technology stocks or the stock market in general experiences loss of investor confidence, the trading price of our Common Stock could decline for reasons unrelated to our business, financial condition or operating results. The trading price of our shares might also decline in reaction to events that affect other companies in our industry, even if these events do not directly affect us. Each of these factors, among others, could harm the value of your investment in our Common Stock. In the past, following periods of volatility in the market, securities class-action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management's attention and resources, which could materially and adversely affect our business, operating results and financial condition.

***In making your investment decision, you should understand that we and the underwriters have not authorized any other party to provide you with information concerning us or this offering.***

You should carefully evaluate all of the information in this prospectus and the registration statement of which this prospectus forms a part before investing in our Company. We may receive media coverage regarding our Company, including coverage that is not directly attributable to statements made by our officers, that incorrectly reports on statements made by our officers or employees, or that is misleading as a result of omitting information provided by us, our officers or employees. We and the underwriters have not authorized any other party to provide you with information concerning us or this offering, and you should not rely on this information in making an investment decision.

***Sales of a significant number of shares of our Common Stock in the public markets or significant short sales of our Common Stock, or the perception that such sales could occur, could depress the market price of our Common Stock and impair our ability to raise capital.***

Sales of a substantial number of shares of our Common Stock or other equity-related securities in the public markets, could depress the market price of our Common Stock. If there are significant short sales of our Common Stock, the price decline that could result from this activity may cause the share price to decline more so, which, in turn, may cause long holders of the Common Stock to sell their shares, thereby contributing to sales of Common Stock in the market. Such sales also may impair our ability to raise capital through the sale of additional equity securities in the future at a time and price that our management deems acceptable, if at all.

***We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.***

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section of this prospectus entitled "Use of Proceeds." The failure by our management to apply these funds effectively could harm our business.

***The requirements of being a U.S. public company may strain our resources and divert management's attention.***

As a U.S. public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming, or costly, and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual and current reports with respect to our business and operating results.

As a result of disclosure of information in this prospectus, the registration statement of which this prospectus forms a part, and in filings required of a public company, our business and financial condition is more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business and operating results could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert resources of our management and harm our business and operating results.

***If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our share price and trading volume could decline.***

The trading market for our Common Stock may depend in part on the research and reports that securities or industry analysts may publish about us or our business, our market and our competitors. We do not have any control over such analysts. If one or more such analysts downgrade or publish a negative opinion of our Common Stock, our share price would likely decline. If analysts do not cover our Company or do not regularly publish reports on us, we may not be able to attain visibility in the financial markets, which could have a negative impact on our share price or trading volume.

***We do not intend to pay dividends on our Common Stock for the foreseeable future.***

We have never declared or paid any cash dividends on our Common Stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our Board. Accordingly, investors must rely on sales of their Common Stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

***There is no public market for the Pre-Funded Warrants or the Warrants being offered in this offering.***

There is no established public trading market for the Pre-Funded Warrants or the Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Pre-Funded Warrants or the Warrants on any securities exchange or nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the Pre-Funded Warrants and the Warrants will be limited.

***The Pre-Funded Warrants and the Warrants are speculative in nature.***

The Pre-Funded Warrants and the Warrants offered hereby do not confer any rights of Common Stock ownership on their respective holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of Common Stock at a fixed price. Specifically, commencing on the date of issuance, (i) holders of the Pre-Funded Warrants may exercise their right to acquire the Common Stock and pay an exercise price of \$0.01 per share and (ii) holders of the Warrants may exercise their right to acquire the Common Stock and pay an exercise price of \$ per share, or 100% of the public offering price per share of our Common Stock. Moreover, following this offering, the market value of the Pre-Funded Warrants and the Warrants is uncertain and there can be no assurance that the market value of the Pre-Funded Warrants and the Warrants will equal or exceed their public offering price. Furthermore, each Pre-Funded Warrant and each Warrant will expire five years from the original issuance date.

In the event that our Common Stock price does not exceed the exercise price of the Pre-Funded Warrants or the Warrants during the period when the Pre-Funded Warrants and the Warrants are exercisable, as applicable, such warrants may not have any value.

***Holders of the Pre-Funded Warrants and the Warrants purchased in this offering will have no rights as common stockholders until such holders exercise such warrants and acquire our Common Stock.***

Until holders of the Pre-Funded Warrants and the Warrants acquire shares of our Common Stock upon exercise thereof, holders of such Pre-Funded Warrants and Warrants will have no rights with respect to the shares of our Common Stock underlying such Pre-Funded Warrants and Warrants. Upon exercise of the Pre-Funded Warrants or the Warrants, such holders will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections of this prospectus entitled “Prospectus Summary” and “Risk Factors,” but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “objective,” “ongoing,” “plan,” “predict,” “project,” “potential,” “should,” “will,” or “would,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this prospectus, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. Forward-looking statements include statements about:

- our ability to continue to increase revenue, secure new consumer electronics customers and maintain existing customers;
- the effects of increased competition as well as innovations by new and existing competitors in our market;
- our ability to effectively manage or sustain our growth;
- our ability to maintain, or strengthen awareness of, our solutions and our reputation;
- potential acquisitions and integration of complementary business and technologies;
- our expected use of proceeds;
- perceived or actual integrity, reliability, quality or compatibility problems with our product solutions;
- statements regarding future revenue, hiring plans, expenses, capital expenditures, capital requirements and stock performance;
- our ability to attract and retain qualified employees and key personnel and further expand our overall headcount;
- our ability to grow both domestically and internationally;
- our ability to stay abreast of new or modified laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- our ability to maintain, protect and enhance our IP;
- costs associated with defending IP infringement and other claims; and
- the future trading prices of our Common Stock and the impact of securities analysts’ reports on these prices.

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

You should refer to the “Risk Factors” section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act, do not protect any forward-looking statements that we make in connection with this offering. In addition, statements that state “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

#### **INDUSTRY AND MARKET DATA**

Unless otherwise indicated, information contained in this prospectus concerning our industry and the market in which we operate, including our market position, market opportunity and market size, is based on information from various sources, on assumptions that we have made based on such data and other similar sources and on our knowledge of the markets for our products. These data sources involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates.

Neither we nor the underwriters have independently verified any third-party information. While we believe the market position, market opportunity and market size information included in this prospectus is generally reliable, such information is inherently imprecise. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

## USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of 1,226,415 shares of our Common Stock, Pre-Funded Warrants and Warrants in this offering will be approximately \$5,700,000 (or \$6,597,000 if the underwriters fully exercise their over-allotment option solely for shares of our Common Stock), excluding any exercise of the Pre-Funded Warrants and the Warrants issued in connection with this offering, based upon an assumed public offering price of \$5.30 per share and accompanying Warrant, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We will only receive additional proceeds from the exercise of the Pre-Funded Warrants and the Warrants issuable in this offering if such Pre-Funded Warrants and Warrants are exercised at their respective exercise prices of \$0.01 and \$ per share of Common Stock and the holders of such Pre-Funded Warrants and Warrants pay the exercise price of such Pre-Funded Warrants and Warrants in cash.

As of the date of this prospectus, we cannot predict with certainty all the uses for the net proceeds to be received upon the completion of this offering. We expect to use the net proceeds on product development, repayment of debt, working capital, capital expenditures and other general corporate purposes, including investments in sales and marketing in the United States and internationally. We plan to use the proceeds of this offering, net of expenses, to repay an aggregate of \$2,040,000 to the holder of the March 2020 Note, which matures two years from the date of issuance and does not accrue interest unless a default has occurred. Pending our use of the net proceeds from this offering, we intend to invest a portion of the net proceeds in a variety of capital preservation investments, including short-term, interest-bearing instruments and U.S. government securities. We have not allocated specific amounts of net proceeds for any of these purposes.

This expected use of net proceeds from this offering and our existing cash and cash equivalents represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including timing of receipts from customers. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We have no current agreements, commitments or understandings for any material acquisitions or licenses of any products, businesses or technologies.

## **DIVIDEND POLICY**

We have never declared or paid any dividends on our Common Stock. We currently intend to retain all available funds and any future earnings for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying dividends in the foreseeable future. In addition, pursuant to the Certificate of Designations, so long as any Series A Preferred Stock is outstanding, we are not permitted to directly or indirectly declare or pay any dividend on our Common Stock as long as any dividends due on the Series A Preferred Stock remain unpaid. The payment of dividends will be at the discretion of our Board and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our future debt agreements, and other factors that our Board may deem relevant.

## CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of December 31, 2019:

- on an actual basis as of December 31, 2019;
- on a pro forma basis to give effect to our receipt of (i) \$100,000 from the issuance of a convertible promissory note in the amount of \$111,100 at a 10% original issue discount on January 24, 2019 which was repaid on March 31, 2020, (ii) net proceeds of approximately \$711,000 from the issuance of 91,062 shares of Common Stock sold in the February 2020 Private Placement and (iii) net proceeds of approximately \$1,369,000 from the issuance of the March 2020 Note in the aggregate principal amount of \$2,040,000 and the March 2020 Warrant;
- on a pro forma as adjusted basis to give further effect to the pro forma adjustments described above and to the issuance and sale of 1,226,415 shares of our Common Stock in this offering at an assumed public offering price of \$5.30 per share, which is the last reported sale price for our Common Stock on Nasdaq on April 17, 2020, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, and assuming no Pre-Funded Warrants are issued.

All share and price per share information in this Capitalization section has been adjusted to reflect our one-for-twenty reverse stock split, effective on April 9, 2020.

Our capitalization following the closing of this offering will be adjusted based on the actual public offering price and other terms of this offering determined at pricing. You should read this table together with our consolidated financial statements and the related notes and the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 25, 2020, which is incorporated by reference herein.

	As of December 31, 2019		
	Actual	Pro Forma	Pro Forma As Adjusted
	(unaudited)		
	(in thousands, except per share and per share data)		
Cash and cash equivalents	\$ 298	\$ 2,367	\$ 6,027
Convertible promissory notes	-	2,040	-
Series A 8% Senior Convertible Preferred stock, \$0.0001 par value per share: 1,250,000 shares authorized; 250,000 shares issued and outstanding – actual, pro forma and pro forma as adjusted	517	517	517
Stockholders' Equity:			
Common stock, par value \$0.0001, 200,000,000 shares authorized and 1,243,702, 1,334,764 and 2,561,179 shares issued and outstanding - actual, pro forma (unaudited) and pro forma as adjusted (unaudited)	-	-	-
Additional paid-in capital	188,320	189,031	194,731
Accumulated other comprehensive loss	(48)	(48)	(48)
Accumulated deficit	(187,678)	(187,678)	(187,678)
Total stockholders' equity	594	1,305	7,005
Total capitalization	\$ 1,111	\$ 3,862	\$ 7,522

The total number of shares of our Common Stock reflected in the discussion and tables above is based on 1,243,702 shares of our Common Stock outstanding as of December 31, 2019, but excludes (a) shares of Common Stock to be issued upon exercise of warrants and pre-funded warrants to purchase an aggregate of 396,997 shares of Common Stock as of such date, (b) 1,057 shares of restricted stock to be released to a terminated employee in three equal tranches over the next 14 months pursuant to the terms of such employee's restricted stock agreement, (c) 20,000 unvested Deferred Shares issued to Mr. Howse pursuant to the Deferred Shares Agreement, (d) 12,500 shares of Common Stock issuable to Lisa Walsh upon the conversion of 250,000 shares of our Series A Preferred Stock held by Ms. Walsh, (e) the exercise of any Underwriters' Warrants issued in connection with this offering and (f) the exercise of any Warrants issued in connection with this offering (assuming no issuance of any Pre-Funded Warrants and no exercise of the underwriters' over-allotment option).

## DILUTION

If you invest in our Common Stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share of our Common Stock and the as adjusted net tangible book value per share of our Common Stock after this offering.

Our historical net tangible book value as of December 31, 2019 was \$1,083,000, or \$0.87 per share of our Common Stock. Historical net tangible book value per share represents the amount of our total tangible assets, less total liabilities, divided by the number of shares of our Common Stock outstanding as of December 31, 2019.

Our pro forma net tangible book value as of December 31, 2019 was \$1,112,000 or \$0.83 per share of our Common Stock after giving effect to our receipt (i) \$100,000 from the issuance of a convertible promissory note in the amount of \$111,100 at a 10% original issue discount on January 24, 2019 which was repaid on March 31, 2020, (ii) net proceeds of approximately \$711,000 from the issuance of 91,062 shares of Common Stock sold in the February 2020 Private Placement and (iii) net proceeds of approximately \$1,369,000 from the issuance of the March 2020 Note in the aggregate principal amount of \$2,040,000 and the March 2020 Warrant.

All share and price per share information in this Dilution section has been adjusted to reflect our one-for-twenty reverse stock split, effective on April 9, 2020.

After giving effect to the pro forma adjustments and the issuance and sale of 1,226,415 shares of our Common Stock in this offering at an assumed public offering price of \$5.30 per share, which is the last reported sale price of our Common Stock on Nasdaq on April 17, 2020, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, assuming no exercise of the underwriters' over-allotment option and assuming the repayment of the March 2020 Note in the amount of \$2,040,000, our pro forma as adjusted net tangible book value as of December 31, 2019 would have been approximately \$6,812,000, or approximately \$2.66 per share. This represents an immediate increase in pro forma net tangible book value per share of \$1.83 to existing stockholders and immediate dilution of \$2.64 per share to new investors purchasing Common Stock in this offering. Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed public offering price per share	\$	5.30
Net tangible book value per share as of December 31, 2019, before giving effect to: (1) the issuance of a convertible promissory note in the amount of \$111,100 which has been repaid, (2) the issuance of Common Stock in connection with the February 2020 Private Placement, (3) the issuance of our securities in connection with the March 2020 Private Placement and (4) this offering	\$	0.87
Decrease in pro forma net tangible book value per share attributed to the issuance of a convertible promissory note in the amount of \$111,100 which has been repaid (2) the issuance of Common Stock in connection with the February 2020 Private Placement, (3) the issuance of our securities in connection with the March 2020 Private Placement and (4) this offering		(0.04)
Increase in pro forma as adjusted net tangible book value per share attributed to new investors purchasing shares from us in this offering		1.83
Pro forma, as adjusted, net tangible book value per share after giving effect to this offering		<u>2.66</u>
Dilution to pro forma, as adjusted, net tangible book value per share to new investors in this offering	\$	<u>2.64</u>

The dilution information discussed above is illustrative only and will change based on the actual public offering price and other terms of this offering to be determined at pricing. A 10% or \$0.53 increase (decrease) in the assumed public offering price of \$5.30 per share would increase (decrease) the pro forma as adjusted net tangible book value per share by approximately \$0.23, assuming the number of shares of Common Stock offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the estimated underwriting discounts and commissions and assuming no issuance of any Pre-Funded Warrants. We may also increase or decrease the number of shares of Common Stock and accompanying Warrants that we are offering from the number of shares of Common Stock and accompanying Warrants set forth above. An increase of 122,642 in the assumed number of shares of Common Stock and accompanying Warrants sold by us in this offering would result in an increase in our as adjusted net tangible book value of approximately \$598,000, or approximately \$0.10 per share, and the dilution per share to investors purchasing Common Stock and accompanying Warrants in this offering would be approximately \$2.54 per share, assuming that the assumed combined public offering price per share of Common Stock and accompanying Warrant remains the same, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, and assuming no issuance of any Pre-Funded Warrants.

The following table summarizes as of December 31, 2019, on a pro forma basis, as described above, the number of shares of our Common Stock, the total consideration and the average price per share (1) paid to us by our existing stockholders and (2) to be paid by investors purchasing shares of our Common Stock in this offering at an assumed public offering price of \$5.30 per share, before deducting underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares Purchased		Total Consideration		Average Price
	Number	Percent	Amount	Percent	Per Share
Existing stockholders	1,334,764	52.1%	\$ 109,013,271	94.4%	\$ 81.67
New investors	1,226,415	47.9%	\$ 6,500,000	5.6%	5.30
Total	2,561,179	100.0%	\$ 115,513,271	100.0%	\$ 45.10

The total number of shares of our Common Stock reflected in the discussion and tables above is based on 1,243,702 shares of our Common Stock outstanding as of December 31, 2019, but excludes (a) shares of Common Stock to be issued upon exercise of warrants and pre-funded warrants to purchase an aggregate of 396,997 shares of Common Stock as of December 31, 2019, (b) 1,057 shares of restricted stock to be released to a terminated employee in three equal tranches over the next 14 months pursuant to the terms of such employee's restricted stock agreement, (c) 20,000 unvested Deferred Shares issued to Mr. Howse pursuant to the Deferred Shares Agreement, (d) 12,500 shares of Common Stock issuable upon conversion of 250,000 shares of our Series A Preferred Stock issued to Lisa Walsh on April 18, 2019, (e) the exercise of the underwriters' over-allotment option, (f) the exercise of any Underwriters' Warrants issued in connection with this offering and (g) the exercise of any Pre-Funded Warrants or Warrants issued in connection with this offering.

As of the date of this prospectus, there are outstanding (i) 250,000 shares of our Series A Preferred Stock, which are convertible into 12,500 shares of Common Stock at a price of \$80.00 per share (subject to adjustment under the Certificate of Designations upon certain subsequent transactions and events described therein, but which price cannot be reduced below of \$1.50); and (ii) the March 2020 Note, which is convertible into shares of Common Stock at a price per share equal to the lesser of (x) 90% of the average of the five lowest daily VWAPs (as defined in the March 2020 Note) during the previous twenty trading days prior to the applicable conversion date and (y) \$6.40, subject to certain adjustments.

As of the date of this prospectus, there were warrants outstanding for the purchase of 703,099 shares of Common Stock. To the extent that warrants or pre-funded warrants are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of Common Stock or preferred stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our directors and executive officers, the following is a summary of transactions since the years ended December 31, 2018 and 2019 to which we have been a party in which the amount involved exceeded the lesser of (i) \$120,000 or (ii) one percent of the average of our total assets at year-end for the last three completed fiscal years, and in which any of our then directors, executive officers or holders of more than 5% of any class of our stock at the time of such transaction, or any members of their immediate family, had or will have a direct or indirect material interest. See also “Executive Compensation” for additional information regarding compensation of related parties.

All share and price per share information in this section has been adjusted to reflect our one-for-twenty reverse stock split, effective on April 9, 2020.

### *Warrant Amendment and Exercise Agreements*

Between September 25, 2019 and October 8, 2019, the Company and certain holders, including Brett Moyer, Gary Williams, Jonathan Gazdak, each of the Medalist Funds (as defined below) and Lisa Walsh (each a “Holder” and collectively, the “Holders”), of the Company’s common stock purchase warrants, with exercise prices between \$60.00 and \$108.00 (collectively, the “Original Warrants”), including the Company’s Series D common stock purchase warrants, Series F common stock purchase warrants (the “Series F Warrants”) and Series G common stock purchase warrants (the “Series G Warrants”), entered into Warrant Amendment and Exercise Agreements (the “Warrant Amendment Agreements”), pursuant to which the Company agreed to reduce the exercise price of each Original Warrant to \$16.00 (the “Reduced Exercise Price”), and for each Original Warrant exercised by a Holder at the Reduced Exercise Price, the Company agreed to reduce the exercise price of Original Warrants to purchase up to an equivalent number of shares of Common Stock (the “Amended Warrants”) to \$15.80 (the “Amended Exercise Price”). The Company entered into Warrant Amendment Agreements with 32 Holders, under which Original Warrants were exercised for a total of 56,420 shares of Common Stock and the Company received gross proceeds of \$903,000. Remaining Original Warrants for 69,071 shares of Common Stock had their exercise price adjusted to the Amended Exercise Price of \$15.80.

Additionally, pursuant to the Warrant Amendment Agreements, the Company agreed to prepare and file with the SEC, as soon as practicable, but in no event later than November 4, 2019 (as extended by the Settlement Agreements (as defined below) to November 18, 2019), a registration statement on Form S-3 to register all shares of Common Stock received by the Holders upon exercise of any Warrant (as defined in the Warrant Amendment Agreements) and all shares of Common Stock underlying the Original Warrants (as defined in the Warrant Amendment Agreements) (such issued and underlying shares, the “Resale Shares”). On December 3, 2019, the Company filed a prospectus to its Registration Statement on Form S-3 (Registration No. 333-234787) for the registration of the Resale Shares.

From November 3, 2019 to November 6, 2019, the Company entered into settlement agreements (each a “Settlement Agreement” and collectively, the “Settlement Agreements”) with each of the Holders (other than the Medalist Funds (as defined herein), whose Settlement Agreement is described below) pursuant to which the Company agreed to issue such Holders an aggregate of 7,648 additional shares of common stock, with such shares meant to compensate such Holders for the difference between the Amended Exercise Price and the lower priced shares that were offered to investors in connection with the Company’s earlier registered direct offering of an aggregate of 125,000 shares of Common Stock, priced at \$14.00 per share, that the Company closed on October 16, 2019 (the “Registered Direct Offering”). In addition, pursuant to the Settlement Agreements, the Company and the Holders agreed to extend the date by which the Company would file a registration statement on Form S-3 to register all of the Resale Shares from November 4, 2019 to November 18, 2019.

**Brett Moyer**

Mr. Moyer has served as the Company’s President, Chief Executive Officer and a Board member since the Company’s founding in August 2010.

In December 2016, Mr. Moyer extinguished secured promissory notes of the Company, consisting of an aggregate principal amount of \$135,704, a promissory note of the Company in the principal amount of \$50,000 and \$69,290 of reimbursable expense reports, and invested the aggregate sum of \$269,091 in the Company’s Series D convertible note (the “Series D Notes”) financing. In connection with the Series D Convertible Notes financing, the Company also issued Mr. Moyer a warrant to purchase 453 shares of common stock at an exercise price of \$108.00. In connection with the extension of the maturity date of such Series D Convertible Note to June 30, 2018, the number of warrants granted to Mr. Moyer in connection with such financing was doubled, or increased by 453, effective February 28, 2018.

In April 2018, the Company issued Mr. Moyer a \$62,500 Series G 20% Original Issue Discount Senior Secured Promissory Note, as amended (a “Series G Note”), in consideration for \$50,000 of expenses incurred by Mr. Moyer. In June 2018, in consideration for extending the maturity date of the Series G Note, Mr. Moyer was granted a warrant to purchase 232 shares of common stock. In July 2018, in consideration for extending the maturity date of the Series G Note and agreeing to make the note convertible, Mr. Moyer was granted a warrant to purchase 695 shares of common stock. On July 25, 2018, in connection with the Company’s IPO, \$537,336 of principal under convertible promissory notes, and all accrued interest, was automatically converted into a total of 7,895 shares of common stock and the warrants issued in connection with the Series G Notes now have an exercise price of \$60.00.

On October 7, 2019, Mr. Moyer entered into a Warrant Amendment Agreement with the Company, as described above. Mr. Moyer exercised Original Warrants for a total of 453 shares of Common Stock and the Company received proceeds of \$7,246. On November 3, 2019, Mr. Moyer entered into a Settlement Agreement with the Company, as described above, pursuant to which the Company issued Mr. Moyer 65 additional shares of Common Stock.

#### **Gary Williams**

Mr. Williams has served as the Company's Chief Accounting Officer since September 2019, as the Company's VP of Finance since August 2010 and previously served as the Company's Chief Financial Officer from August 2010 to September 2019.

On October 7, 2019, Mr. Williams entered into a Warrant Amendment Agreement with the Company, as described above. Mr. Williams exercised Original Warrants for a total of 179 shares of Common Stock and the Company received proceeds of \$2,862. On November 3, 2019, Mr. Williams entered in a Settlement Agreement with the Company, as described above, pursuant to which the Company issued Mr. Williams 26 additional shares of Common Stock.

#### **Michael Fazio**

Mr. Fazio is the chairman of MARCorp Financial LLC, a private equity firm located in Illinois, of which MARCorp Signal, LLC is a wholly-owned subsidiary. Mr. Fazio previously served as a member of the Board, which tenure commenced on May 2017 and ended on June 19, 2019. Pursuant to a settlement agreement that the Company entered into with MARCorp Signal, LLC on July 25, 2018, a warrant to purchase an aggregate of 24,394 shares of Common Stock was issued to MARCorp Signal, LLC, and following the Company's IPO, the exercise price of the warrants issued in connection with the Series E Convertible Note (defined below) became \$60.00.

#### **Jonathan Gazdak**

Mr. Gazdak is Managing Director – Head of Investment Banking for Alexander Capital, L.P., an investment banking firm based in New York. Mr. Gazdak has been a member of the Board since June 2015. Alexander Capital, L.P. has acted as the lead investment bank in a number of the Company's private financings and as an underwriter for the Company's IPO.

The Company signed an engagement letter with Alexander Capital, L.P. in August of 2014 ("August 2014 Engagement Letter"), under which Alexander Capital, L.P. earned a fee on total investments by their clients. Alexander Capital, L.P. earned fees of \$321,300 and \$0 for the years ended December 31, 2018 and 2019, respectively, under the August 2014 Engagement Letter. In connection with the August 2014 Engagement Letter, which was terminated immediately prior to the IPO, Alexander Capital, L.P. has been issued warrants to purchase a total of 29,420 shares of Common Stock, exercisable at prices between \$66.00 and \$108.00 per share and for five years from the date of issuance.

Pursuant to the underwriting agreement entered into between the Company and Alexander Capital, L.P. in connection with the IPO (the "Underwriting Agreement"), Alexander Capital, L.P. was paid a cash fee of \$900,000, as well as a non-accountable expense allowance of \$120,000 and reimbursements of \$100,000. Pursuant to the Underwriting Agreement, the Company issued Alexander Capital, L.P. a warrant to purchase 3,600 shares of Common Stock. Such warrant is exercisable at a per share price of \$125.00 and is exercisable at any time during the five-year period commencing 180 days from the effective date of the IPO, which period shall not exceed five years from such effective date.

On July 25, 2018, in connection with the Company's IPO, \$21,176 of principal under convertible promissory notes, and all accrued interest, were automatically converted into a total of 283 shares of Common Stock.

On April 4, 2019, the Company signed another engagement letter with Alexander Capital, L.P. under which Alexander Capital, L.P. earns a fee on total investments by its clients. In connection with the issuance of the initial tranche of the Series A Preferred Stock, Alexander Capital, L.P. earned a fee of \$80,000 and the Company agreed to issue it a warrant to purchase 2,041 shares of Common Stock. Such warrant is exercisable at a per share price of \$43.60 and is exercisable at any time during the five-year period commencing 180 days from the effective date of the issuance of such Common Stock, which period shall not exceed five years from such effective date.

On April 17, 2019, the Company entered into an underwriting agreement with Alexander Capital, L.P. in connection with an offering by the Company of 203,787 shares of Common Stock, pursuant to which Alexander Capital, L.P. was paid cash fees of \$406,554 as well as a non-accountable expense allowance of \$54,207 and reimbursements of \$100,000 and pursuant to which the Company agreed to issue a warrant to purchase 6,114 shares of Common Stock. Such warrant is exercisable at a per share price of \$33.20 and is exercisable at any time during the five-year period commencing 180 days from the effective date of the issuance of such Common Stock, which period shall not exceed five years from such effective date.

On October 16, 2019, the Company entered into another underwriting agreement with Alexander Capital, L.P. in connection with an offering by the Company of up to an aggregate of 125,000 shares of Common Stock, pursuant to which Alexander Capital, L.P. was paid cash fees of \$131,250 as well as a non-accountable expense allowance of \$17,500 and reimbursements of \$43,750 and pursuant to which the Company agreed to issue a warrant to purchase 3,750 shares of Common Stock. Such warrant is exercisable at a per share price of \$17.50 and is exercisable at any time during the five-year period commencing one year from the effective date of the issuance of such stock, which period shall not exceed five years from such effective date.

On October 7, 2019, Mr. Gazdak entered into a Warrant Amendment Agreement with the Company, as described above. Mr. Gazdak exercised Original Warrants for a total of 157 shares of Common Stock and the Company received proceeds of \$2,510. On November 6, 2019, Mr. Gazdak entered into a Settlement Agreement with the Company, as described above, pursuant to which the Company issued Mr. Gazdak 23 additional shares of Common Stock. In connection with the Company's entry in the Warrant Amendment Agreements, Alexander Capital, L.P. was paid a cash fee of \$51,374.

On February 6, 2020, the Company entered into another underwriting agreement with Alexander Capital, L.P. in connection with an offering by the Company of up to an aggregate of \$835,000 of the Company's securities, pursuant to which Alexander Capital, L.P. was paid cash fees of \$83,000 and pursuant to which the Company agreed to issue to Alexander Capital, L.P. a warrant to purchase 4,553 shares of Common Stock. Such warrant is exercisable at a per share price of \$8.80 and is exercisable at any time during the five-year period commencing on the date of issuance.

#### **Helge Kristensen**

In February 2016, Inizio Capital an investment company based in the Cayman Islands, for which Mr. Kristensen serves as a director, loaned the Company \$50,000 under a convertible promissory note (the "Inizio Note"). On July 25, 2018, in connection with the Company's IPO, the Inizio Note and all accrued interest, were automatically converted into a total of 1,397 shares of common stock.

In August 2019, we issued a \$360,000 purchase order to Hansong Technology. Pursuant to such purchase order, we will pay \$360,000 to Hansong Technology for the purchase of certain products. Additionally, Hansong Technology purchased \$63,523 of our modules pursuant to purchase orders issued in 2019, with \$22,923 received by us in 2019 and the remaining amount expected to be received in 2020. See "Risk Factors - *We entered into a purchase order with a company in which one of our directors is an executive officer, the fulfillment of which could cause such director to no longer be independent*" – for certain risks relating to Mr. Kristensen's no longer being considered an "independent director" if these payments are made.

## **Michael Howse**

The Company is party to an agreement with Michael Howse, dated April 6, 2018, as amended effective as of December 27, 2018 (the “Howse Agreement”), pursuant to which Mr. Howse was appointed interim role as chief strategy officer on an “at-will” basis in consideration for a monthly cash salary as well as (i) a warrant to purchase 5,500 shares of our common stock, exercisable at a per share price of \$40.00 and which vested monthly over a nine-month period and which fully vested on January 6, 2019 and (ii) a warrant to purchase 8,250 shares of our common stock, exercisable at a per share price of \$40.00, which shall vest, so long as Mr. Howse continues to serve as interim chief strategy officer and/or as a member of our Board, (x) as to 5,500 shares of common stock upon the achievement of a significant milestone and (y) as to 2,750 shares of common stock upon the achievement of an additional significant milestone. The foregoing exercise prices are subject to adjustment as provided in each warrant. Pursuant to the Howse Agreement, such warrants shall fully vest on the earlier of (1) immediately prior to a Fundamental Transaction, as defined in such agreement, (2) Mr. Howse’s removal from our Board for any reason other than his resignation, his intentional illegal conduct or gross misconduct, or his conviction for any felony, theft, embezzlement or violent crime. In addition, pursuant to the Howse Agreement, we also agreed to appoint Mr. Howse to our Board, where he may only be removed for cause, or his termination or resignation.

Under the Howse Agreement, if the Company raises capital in one or more financings from certain pre-approved strategic investors, or is acquired by a third-party during the period that Mr. Howse serves as interim chief strategy officer (or within six months thereafter), he will receive a percentage cash bonus concurrently with the closing of such transaction based on the amount raised or consideration paid for the Company, as applicable, (A) which bonus doubles in the event that the Company does not incur an amount equal to 2% or more of the Consideration (as defined in the Howse Agreement) in fees to any investment bank in connection with such transaction, if such transaction is a Fundamental Transaction (such fees, “General Expenses”), and (B) 50% of which bonus may be paid as a convertible note or preferred equity with the same terms as the other participants in such transaction, if such transaction is a financing. Pursuant to the Howse Agreement, we may terminate Mr. Howse at any time, with or without cause, upon 90 days’ prior written notice. Such agreement provides for Company-sponsored benefits in accordance with our policies. Pursuant to the Howse Agreement, effective November 1, 2018, Mr. Howse was placed on our payroll and is now considered a part-time Company employee.

In connection with the Howse Agreement, the Company is also party to the Deferred Shares Agreement, pursuant to which the Company granted Mr. Howse up to 20,000 Deferred Shares under the LTIP. Pursuant to such agreement, if a Fundamental Transaction has not occurred within 180 days of the earlier of the date on which Mr. Howse no longer serves (i) as our interim chief strategy officer or (ii) on our Board, all of the Deferred Shares shall be forfeited and Mr. Howse will have no further rights to such shares. Pursuant to such agreement, the Deferred Shares shall vest immediately prior to a Fundamental Transaction, and the number of Deferred Shares that shall vest is based on the Consideration paid for the Company in such transaction, which number of Deferred Shares that shall vest to double in the event that the Company does not incur General Expenses.

## **Brian Herr**

Mr. Herr is Chief Investment Officer and Co-Head of Structured Credit and Asset Finance, for the Medalist Partners platform (f/k/a Candlewood Structured Strategy Funds), serves as a partner and co-portfolio manager for each of the Medalist Partners Harvest Master Fund, Ltd. and Medalist Partners Opportunity Master Fund A, LP (collectively, the “Medalist Funds”), and is a former director of the Company who resigned from the Board effective February 10, 2020. Mr. Herr was granted a seat on the Board pursuant to a securities purchase agreement, dated as of November 30, 2017, between the Company and the Medalist Funds, pursuant to which the Company also issued to the Medalist Funds an aggregate of \$2,000,000 Series F Convertible Notes and warrants to purchase an aggregate of 11,112 shares of our common stock which are exercisable for a price of \$72.00 per share. In addition, between April 20, 2018 and June 29, 2018, the Company issued an aggregate of \$2,437,500 of Series G Convertible Notes to the Medalist Funds and warrants to purchase an aggregate of 9,029 shares of our common stock. In July 2018, in consideration for extending the maturity date of the Series G Convertible Notes and agreeing to make the note convertible, the Medalist funds were granted a warrant to purchase 27,084 shares of common stock. On July 25, 2018, in connection with the Company’s IPO, \$3,950,000 of principal under convertible promissory notes, and all accrued interest, were automatically converted into a total of 97,518 shares of common stock and the exercise price of the warrants issued in connection with the Series G Notes became \$60.00.

In addition, on October 8, 2019, each of the Medalist Funds entered into a Warrant Amendment Agreement with the Company, as described above. In connection with and prior to the Warrant Amendment Agreement that each of the Medalist Funds entered into, the Company also executed Amendment No. 1 to the Series F Warrants held by each of the Medalist Funds (the “Series F Warrant Amendment”), pursuant to which each such Series F Warrant was further amended to add, among other things, fundamental transaction and subsequent rights offerings provisions as well as a 9.99% beneficial ownership limitation (the “Beneficial Ownership Limitation”).

Pursuant to Warrant Amendment Agreements that were entered into with each of the Medalist Funds, with respect to the Series F Warrants and Series G Warrants, if the exercise of an Original Warrant at the Reduced Exercise Price would cause each of the Medalist Funds to exceed the Beneficial Ownership Limitation, in lieu of receiving such number of shares of Common Stock in excess of the Beneficial Ownership Limitation, the Company will only issue such number of shares of Common Stock to each of the Medalist Funds as would not cause each of the Medalist Funds to exceed the maximum number of shares of Common Stock permitted under the Beneficial Ownership Limitation, and each of the Medalist Funds shall be issued, at an exercise price equal to the Reduced Exercise Price less \$15.80 per share, pre-funded common stock purchase warrants covering such number of shares of Common Stock as would otherwise have been in excess of the Beneficial Ownership Limitation (the "Pre-Funded Warrants"). In connection with such exercises, the Medalist Funds were issued Pre-Funded Warrants to purchase an aggregate of 20,719 shares of Common Stock. The Company received aggregate gross proceeds of approximately \$327,000 in connection with the Pre-Funded Warrants.

On November 4, 2019, the Company entered into a Settlement Agreement with the Medalist Funds, pursuant to which the Company agreed to pay the Medalist Funds an aggregate of \$47,223 in cash, with such cash meant to compensate the Medalist Funds for the difference between the Amended Exercise Price and the lower priced shares of Common Stock that were offered to investors in connection with the Registered Direct Offering. In addition, pursuant to the Settlement Agreement, the Company and the Medalist Funds agreed to extend the date by which the Company would file a registration statement on Form S-3 to register all of the Resale Shares from November 4, 2019 to November 18, 2019.

#### **Significant Stockholders**

In January 2017, Carl E. Berg invested the aggregate sum of \$300,000 in the Company's Series D Convertible Note financing and was granted a warrant to purchase 961 shares of common stock at an exercise price of \$108.00.

Effective February 28, 2018, Mr. Berg agreed to extend the maturity date of such note to June 30, 2018, which was later amended to extend the maturity date to July 25, 2018, and which accrued an additional 10% interest on the first day of every month, beginning March 1, 2018, so long as such note remained outstanding. In connection with the maturity date extension, Mr. Berg's warrant to purchase 1,961 shares of common stock at an exercise price of \$108.00 was doubled, or increased by 1,961. In addition, Mr. Berg agreed to extend the maturity date of his various other convertibles notes to June 30, 2018, which was later amended to extend the maturity date to July 25, 2018. In connection with the maturity date extensions, Mr. Berg received warrants to purchase a total of 1,299 shares of common stock at an exercise price of \$108.00.

On July 25, 2018, in connection with the Company's IPO, \$1,479,412 of principal under convertible promissory notes, and all accrued interest, were automatically converted into a total of 23,235 shares of common stock.

In July 2017, Lisa Walsh invested an additional \$360,000 in the Company's Series D Convertible Note financing and received a warrant to purchase 2,353 shares of common stock at an exercise price of \$108.00. Effective February 28, 2018, Ms. Walsh agreed to extend the maturity date of such note to June 30, 2018, which was later amended to extend the maturity date to July 25, 2018, and which accrued an additional 10% interest on the first day of every month, beginning March 1, 2018, so long as such note remained outstanding. In connection with the maturity date extension, the warrants granted to Ms. Walsh to purchase 5,621 shares of common stock at an exercise price of \$108.00 was doubled, or increased by 5,621. In November 2017, Ms. Walsh invested \$6,500,000 in the Company's Series F Convertible Note financing and was issued warrants to purchase 36,112 shares of common stock at an exercise price of \$108.00 per share.

In May 2018, Ms. Walsh participated in the Company's Series G Convertible Notes offering and was issued a \$312,500 Series G Convertible Note and a warrant to purchase 1,158 shares of common stock. In July 2018, in consideration for extending the maturity date of the Series G Convertible Notes and agreeing to make the note convertible, Ms. Walsh was granted a warrant to purchase 3,473 shares of common stock. On July 25, 2018, in connection with the Company's IPO, \$8,330,147 of principal under convertible promissory notes, and all accrued interest, were automatically converted into a total of 146,933 shares of common stock and the exercise price of the warrants issued in connection with the Series F and Series G Notes became \$72.00 and \$60.00, respectively.

On April 18, 2019, the Company entered into a Securities Purchase Agreement, dated as of April 18, 2019, with Ms. Walsh (the “Preferred SPA”), pursuant to which the Company issued 250,000 shares of its Series A 8% Senior Convertible Preferred Stock, par value \$0.0001 per share (the “Series A Preferred Stock”), which shares have a stated value of \$80.00, grant holders the same voting rights as holders of our shares of Common Stock, and are convertible into shares of Common Stock at a price of \$80.00 per share, which price cannot be reduced below \$30.00, and which is subject to adjustment under the Certificate of Designations of the Preferences, Rights and Limitations of the Series A Preferred Stock upon certain subsequent transactions and events described therein, in consideration for \$1,000,000 (the “Initial Tranche”). The Series A Preferred Stock may be issued in tranches of at least \$500,000 and in an aggregate of up to \$5,000,000. In connection with the Initial Tranche, the Company also issued to Ms. Walsh a warrant to purchase 12,756 shares of Common Stock, which is immediately exercisable, has a five-year life, has an exercise price of \$39.60 and is subject to 4.99/9.99% blockers and to adjustment for stock dividends and splits. Pursuant to the Preferred SPA, holders of shares of the Series A Preferred Stock (i) have the right to require the Company to register the shares of Series A Preferred Stock as well as the shares of Common Stock underlying such shares and the warrant issued to Ms. Walsh within 180 days of the Closing Date (as defined in the Preferred SPA) on which purchasers have committed to purchase an aggregate of amount of Series A Preferred Stock with an aggregate stated value equal to or exceeding \$1,000,000.

In connection with the October 16, 2019 Registered Direct Offering, Ms. Walsh purchased 50,000 shares of Common Stock at a price of \$14.00 per share. The Company received proceeds of \$700,000 from such purchase.

On October 7, 2019, Ms. Walsh entered into a Warrant Amendment Agreement with the Company, as described above. Ms. Walsh exercised Original Warrants for a total of 25,992 shares of Common Stock and the Company received proceeds of \$415,862. On November 3, 2019, Ms. Walsh entered into a Settlement Agreement with the Company, as described above, pursuant to which the Company agreed to issue Ms. Walsh 3,714 additional shares of Common Stock.

#### **Outstanding Equity Grants to Directors and Executive Officers**

We have granted warrants and restricted shares to our certain of our directors and executive officers. For more information regarding the warrants and stock awards granted to our directors and named executive officers, see “Executive Compensation — Outstanding Equity Awards as of December 31, 2019”.

#### **Indemnification Agreements**

We have entered into indemnification agreements with each of our directors and executive officers. Such indemnification agreements require us to indemnify our directors and executive officers to the fullest extent permitted by Delaware law.

#### **Related Person Transaction Policy**

Our Audit Committee considers and approves or disapproves any related person transaction as required by Nasdaq Stock Market regulations. The Company’s written policies and procedures on related party transactions cover any transaction, arrangement or relationship or series of similar transactions, arrangements or relationships (including any indebtedness or guarantee of indebtedness) in which: (i) the Company (or any subsidiary) is a participant; (ii) any related party has or will have a direct or indirect interest; and (iii) the aggregate amount involved (including any interest payable with respect to indebtedness) will or may be expected to exceed \$120,000, except that there is no \$120,000 threshold for members of the Audit Committee. A related party is any: (i) person who is or was (since the beginning of the two fiscal years preceding the last fiscal year, even if they do not presently serve in that role) an executive officer, director or nominee for election as a director; (ii) greater than five percent (5%) beneficial owner of the Company’s common stock; or (iii) immediate family member of any of the foregoing. An immediate family member includes a person’s spouse, parents, stepparents, children, stepchildren, siblings, mothers- and fathers-in-law, sons- and daughters-in-law, and brothers- and sisters-in-law and any person (other than a tenant or employee) sharing the same household as such person.

In determining whether to approve or ratify a related party transaction, the Audit Committee, or disinterested directors, as applicable, will take into account, among other factors it deems appropriate: (i) whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances; (ii) the nature and extent of the related party’s interest in the transaction; (iii) the material terms of the transactions; (iv) the importance of the transaction both to the Company and to the related party; (v) in the case of a transaction involving an executive officer or director, whether the transaction would interfere with the performance of such person’s duties to the Company; and (vi) in the case of a transaction involving a non-employee director or a nominee for election as a non-employee director (or their immediate family member), whether the transaction would disqualify the director or nominee from being deemed an “independent” director, as defined by Nasdaq, and whether the transaction would disqualify the individual from serving on the Audit Committee or the Compensation Committee or other committees of the Board under applicable Nasdaq and other regulatory requirements.

The Audit Committee only approves those related party transactions that are on terms comparable to, or more beneficial to us than, those that could be obtained in arm’s length dealings with an unrelated third party.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of April 17, 2020, information regarding beneficial ownership of our capital stock by:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our equity securities;
- each of our named executive officers;
- each of our directors; and
- all of our executive officers and directors as a group.

All share and price per share information in this Security Ownership of Certain Beneficial Owners and Management section has been adjusted to reflect our one-for-twenty reverse stock split, effective on April 9, 2020.

The percentage ownership information shown in the table prior to this offering is based upon 1,337,067 shares of Common Stock and 250,000 shares of Series A Preferred Stock outstanding as of April 17, 2020. The percentage ownership information shown in the table after this offering is based upon 2,563,482 shares of Common Stock and 250,000 shares of Series A Preferred Stock outstanding, assuming the sale of all 1,226,415 shares of Common Stock and Warrants by us in this offering (assuming no issuance of any Pre-Funded Warrants, no exercise of the underwriters' over-allotment option and excluding 61,320 shares of Common Stock underlying the Underwriters' Warrants). The percentage ownership information shown in the table excludes (i) 705 shares of restricted stock to be released to a terminated employee in two equal tranches over the next 10 months pursuant to the terms of such employee's restricted stock agreement, and (ii) 20,000 unvested Deferred Shares issued to Michael Howse pursuant to the Deferred Shares Agreement. As of the date of the registration statement of which this prospectus forms a part, no holder of Series A Preferred Stock has converted its shares of Series A Preferred Stock into shares of Common Stock.

Beneficial ownership is determined according to the rules of the Securities and Exchange Commission (the "SEC") and generally means that a person has beneficial ownership of a security if he, she or it possesses sole or shared voting or investment power of that security, including securities that are exercisable for shares of Common Stock within sixty (60) days of April 17, 2020. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons named in the table below have sole voting and investment power with respect to all shares of Common Stock shown that they beneficially own, subject to community property laws where applicable.

For purposes of computing the percentage of outstanding shares of our Common Stock held by each person or group of persons named above, any shares of Common Stock that such person or persons has the right to acquire within sixty (60) days of April 17, 2020 is deemed to be outstanding, but is not deemed to be outstanding for the purpose of computing the percentage ownership of any other person. The inclusion herein of any shares of Common Stock listed as beneficially owned does not constitute an admission of beneficial ownership.

Except as otherwise noted below, the address for persons listed in the table is c/o Summit Wireless Technologies, Inc., 6840 Via Del Oro, Ste. 280, San Jose, CA 95119.

	Shares Beneficially Owned Prior to the Offering					% Total Voting Power (1)	Shares Beneficially Owned After the Offering				
	Common Stock		Series A Preferred Stock		Common Stock		Series A Preferred Stock		% Total Voting Power (1)		
	Shares	%	Shares	%		Shares	%	Shares		%	
<b>5% or greater stockholders:</b>											
Carl E. Berg (3)	85,581	6.4%	-	-	6.3%	85,581	3.3%	-	-	3.3%	
Lisa Walsh (4)	322,582	23.5%	12,500	100.0	24.1%	322,582	12.4%	12,500	100.0	12.4%	
MARCorp Signal, LLC (5)	147,618	9.9%	-	-	9.9%	155,118	5.7%	-	-	5.7%	
Medalist Partners LP (6)	136,348	9.9%	-	-	9.9%	145,748	5.6%	-	-	5.6%	
<b>Directors and executive officers (2)</b>											
Brett Moyer (7) Chief Executive Officer and Chairman	25,543	1.9%	-	-	1.9%	25,543	1.0%	-	-	1.0%	
George Oliva (8) Chief Financial Officer	7,500	*	-	-	*	7,500	*	-	-	*	
Gary Williams (9) Chief Accounting Officer and Vice President of Finance	8,781	*	-	-	*	8,781	*	-	-	*	
Jonathan Gazdak (10) Director	12,072	*	-	-	*	12,072	*	-	-	*	
Dr. Jeffrey M. Gilbert (11) Director	2,500	*	-	-	*	2,500	*	-	-	*	
Michael Howse (12) Director	13,750	1.0%	-	-	1.0%	13,750	*	-	-	*	
Helge Kristensen (13) Director	9,848	*	-	-	*	9,848	*	-	-	*	
Sam Runco (14) Director	2,500	*	-	-	*	2,500	*	-	-	*	
Lisa Cummins Dulchinos (15) Director	1,250	*	-	-	*	1,250	*	-	-	*	
Robert Tobias (16) Director	-	-	-	-	-	-	-	-	-	-	
<b>Directors and executive officers as a group (10 persons)</b>	<b>83,744</b>	<b>6.3%</b>	<b>-</b>	<b>-</b>	<b>6.2%</b>	<b>83,744</b>	<b>3.3%</b>	<b>-</b>	<b>-</b>	<b>3.3%</b>	

\* Less than 1%

- (1) Percentage of total voting power represents voting power with respect to all shares of our Common Stock and Series A Preferred Stock, which have the same voting rights as our shares of Common Stock. The holders of our Common Stock and our Series A Preferred Stock are each entitled to one vote per share.
- (2) Includes fully vested warrants to purchase 24,134 shares of Common Stock at exercise prices between \$0.20 and \$108.00 per share.
- (3) Includes fully vested warrants to purchase 5,221 shares of Common Stock at an exercise price of \$108.00 per share.
- (4) Includes (i) fully vested warrants to purchase 38,751 shares of Common Stock with exercise prices ranging from \$15.80 to \$39.60 per share and (ii) 12,500 shares of Common Stock based upon the assumed conversion of 250,000 shares of Series A Preferred Stock convertible into shares of our Common Stock at a price of \$80.00 per share, subject to adjustment under the Certificate of Designations upon certain subsequent transactions and events described therein, and which price cannot be reduced below \$30.00 per share.

- (5) MARCorp Signal, LLC is a wholly-owned subsidiary of MARCorp Financial LLC, of which Michel Fazio, a former director of the Company who resigned in June 2019, serves as chairman. The ownership information shown in the table prior to this offering includes fully vested warrants to purchase 147,618 shares of Common Stock at an exercise price of \$60.00 per share, and excludes (i) warrants to purchase 7,500 shares of Common Stock, with an exercise price of \$60.00 per share, which contain a provision prohibiting exercise to the extent that the holder, together with its affiliates, would beneficially own in excess of 9.99% of the number of shares of our Common Stock outstanding immediately after giving effect to such exercise (subject to increase or decrease upon prior written notice, in the case of any increase, of not less than 61 days).

The ownership information shown in the table after this offering includes fully vested warrants to purchase 147,618 shares of Common Stock at an exercise price of \$60.00 per share and fully vested warrants to purchase 7,500 shares of Common Stock at an exercise price of \$60.00 per share.

- (6) Brian Herr is an employee of Medalist Partners LP (“Medalist”) and/or one of its affiliates, is a partner and co-portfolio manager for each of the Medalist Funds (defined below), and is a former director of the Company who, on February 6, 2020, notified the Company of his decision to resign from the Board and, effective February 10, 2020, was replaced by Robert Tobias as a member of the Board.

Such share amount and percentage of shares owned are based upon a Schedule 13G/A that was jointly filed with the SEC on February 14, 2020 by (i) Medalist, a Delaware limited partnership, (ii) Medalist Partners Harvest Master Fund, Ltd., a Cayman Islands exempted company (“Harvest”) and (iii) Medalist Partners Opportunity Fund A, L.P., a Cayman Islands exempted company (“Opportunity” and, collectively with Harvest, the “Medalist Funds” and, collectively with Harvest and Medalist, the “Reporting Persons”).

Medalist is the investment manager to the Medalist Funds and may be deemed to beneficially own the securities held by the Medalist Funds. Based on such Schedule 13G/A, each of Harvest and Opportunity holds (a) 50,706 shares of Common Stock, (b) warrants (“Medalist Warrants”) exercisable for an aggregate of 11,807 shares of Common Stock and (c) pre-funded warrants (“Medalist Pre-funded Warrants”) exercisable for an aggregate of 10,361 shares of Common Stock.

The Medalist Warrants and the Medalist Pre-funded Warrants are subject to exercise and conversion limitations prohibiting the exercise or conversion of each security to the extent that it would result in the holder, or any of its affiliates, being deemed to beneficially own in excess of 9.99% of the then-outstanding shares of Common Stock. Pursuant to the terms of such 9.99% beneficial ownership limitation, any Medalist Warrants or Medalist Pre-funded Warrants deemed to be beneficially owned by Medalist that would result in its beneficial ownership being in excess of 9.99% of such shares of Common Stock are not exercisable and therefore are not reflected in the above calculations of Medalist’s beneficial ownership in the ownership information shown in the table prior to this offering. The ownership information shown in the table after this offering reflects the fact that such 9.99% beneficial ownership limitation in the Medalist Warrants and the Medalist Pre-funded Warrants will no longer trigger, as the Reporting Persons will be deemed to beneficially own less than 9.99% of such shares of Common Stock.

The principal business office of the Reporting Persons is 777 Third Avenue, Suite 1402, New York, NY 10017.

- (7) Includes (i) 7,087 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019 and (ii) fully vested warrants to purchase 1,692 shares of Common Stock with exercise prices ranging from \$15.80 to \$90.00 per share.
- (8) Includes 7,500 shares of restricted Common Stock that is subject to annual vesting over a period of four years beginning September 1, 2019.
- (9) Includes (i) 3,366 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019 and (ii) fully vested warrants to purchase 385 shares of Common Stock with exercise prices ranging from \$15.80 to \$90.00 per share.
- (10) Includes (i) 1,250 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019 and (ii) fully vested warrants to purchase 8,191 shares of Common Stock with exercise prices ranging from \$66.00 to \$125.00 per share. Excludes warrants to purchase 2,041, 6,114, 3,750 and 4,553 shares of Common Stock, with exercise prices of \$43.60, \$33.20, \$17.50 and \$8.80, respectively, issued to Alexander Capital, L.P., of which Mr. Gazdak is managing director and the head of investment banking.
- (11) Includes 1,250 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019.
- (12) Includes fully vested warrants to purchase 13,750 shares of Common Stock with an exercise price of \$40.00 per share. Excludes 20,000 Deferred Shares issued pursuant to the Deferred Shares Agreement that will vest immediately prior to a Fundamental Transaction.
- (13) Includes (i) 1,250 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019, (ii) 6,667 shares of Common Stock owned indirectly by Inizio Capital, (iii) 565 shares of Common Stock owned indirectly by Hansong Technology, (iv) fully vested warrants to purchase 48 shares of Common Stock at an exercise price of \$108.00 per share owned indirectly by Hansong Technology, and (v) fully vested warrants to purchase 68 shares of Common Stock at an exercise price of \$108.00 per share owned indirectly by Inizio Capital. Mr. Kristensen serves as a director of Inizio Capital and as a vice president of Hansong Technology, and therefore may have voting or investment power over such shares.
- (14) Includes 1,250 shares of restricted Common Stock that is subject to annual vesting over a period of three years beginning September 1, 2019.
- (15) Such shares of restricted Common Stock are subject to annual vesting over a period of three years beginning September 1, 2019.
- (16) Mr. Tobias replaced Brian Herr as a director of the Company, effective February 10, 2020.

## DESCRIPTION OF SECURITIES

The following description of our Common Stock, certain provisions of our certificate of incorporation, as amended, bylaws and Delaware law are summaries. You should also refer to certificate of incorporation, as amended, and our bylaws, which are filed as exhibits to the registration statement of which this prospectus is part.

### General

Our certificate of incorporation, as amended, authorizes the issuance of up to 200,000,000 shares of Common Stock, par value \$0.0001 per share, and up to 20,000,000 shares of blank check preferred stock, par value \$0.0001 per share. Our Board may establish the rights and preferences of the preferred stock from time to time. As of April 17, 2020, there are an aggregate of 1,337,067 shares of Common Stock issued and outstanding, held by 127 stockholders of record (which do not include shares of Common Stock held in street name), and an aggregate of 250,000 shares of Series A Preferred Stock issued and outstanding, held by 1 stockholder of record. This number of shares of Common Stock excludes (a) shares of Common Stock to be issued upon exercise of warrants and pre-funded warrants to purchase an aggregate of 703,099 shares of Common Stock as of April 17, 2020, (b) up to an aggregate of 408,000 shares of Common Stock issuable upon conversion of the March 2020 Note (assuming full conversion of the March 2020 Note using a conversion price equal to the Variable Conversion Price), (c) up to an aggregate of 1,226,415 shares of Common Stock underlying the Warrants to be issued in this offering (assuming no issuance of any Pre-Funded Warrants and no exercise of the underwriters' over-allotment option), (d) up to an aggregate of 61,320 shares of Common Stock underlying the Underwriters' Warrants, (e) 705 shares of restricted stock to be released to a terminated employee in two equal tranches over the next 10 months pursuant to the terms of such employee's restricted stock agreement, (f) 20,000 Deferred Shares under our LTIP issued to Michael Howse, a member of our Board, pursuant the Deferred Shares Agreement, and (g) 12,500 shares of Common Stock issuable upon conversion of 250,000 shares of our Series A Preferred Stock.

On March 31, 2020, our stockholders approved a reverse stock split of our outstanding Common Stock at a specific ratio within a range from one-for-four to one-for-twenty, and also granted authorization to our Board to determine, in its sole discretion, the specific ratio and timing of such reverse stock split. In accordance therewith, on April 9, 2020, a one-for-twenty reverse stock split of our outstanding Common Stock became effective for the trading of our Common Stock. All share and price per share information in this prospectus has been adjusted to reflect such one-for-twenty reverse stock split.

### Common Stock

#### *Voting Rights*

Each holder of our Common Stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Under our bylaws, our stockholders will not have cumulative voting rights. Because of this, the holders of a majority of the Common Stock entitled to vote in any election of directors will be able elect all of the directors standing for election, if they should so choose.

#### *Dividends*

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our Common Stock will be entitled to receive ratably those dividends, if any, as may be declared from time to time by the Board out of legally available funds. The right of holders of our Common Stock to receive dividends is subject to the rights of holders of Series A Preferred Stock to received dividends pursuant to the Certificate of Designations.

#### *Liquidation*

In the event of our liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding preferred stock, including, without limitation, the liquidation preference granted to holders of our Series A Preferred Stock pursuant to the Certificate of Designations.

#### *Rights and Preferences*

Holders of Common Stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to our Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock that we may designate in the future, including, without limitation, the rights granted to holders of our Series A Preferred Stock pursuant to the Certificate of Designations.

### Preferred Stock

Our Board has the authority, without further action by our stockholders, to issue shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares any such series, but not below the number of shares of such series then outstanding.

Our Board may authorize the issuance of shares of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The purpose of authorizing our Board to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of us and may adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. It is not possible to state the actual effect of the issuance of any preferred stock on the rights of holders of common stock until the Board determines the specific rights attached to that class of preferred stock.

On April 18, 2019, we entered into a Securities Purchase Agreement, dated as of April 18, 2019, with a significant stockholder (the “Preferred SPA”), pursuant to which we issued 250,000 shares of our Series A Preferred Stock, which shares have a stated value of \$80.00, grant holders the same voting rights as holders of our shares of Common Stock, and are convertible into shares of our Common Stock at a price of \$80.00 per share, which price cannot be reduced below \$30.00, and is subject to adjustment under our Certificate of Designations upon certain subsequent transactions and events described therein. See “Certain Relationships and Related Party Transactions – Significant Stockholders.”

Other than the issuance of our Series A Preferred Stock pursuant to the Preferred SPA, we have no present plans to issue any additional shares of preferred stock. However, in the event that we issue additional shares of preferred stock after the date of the offering, the investors in this offering will be diluted.

#### **Warrants**

As of April 17, 2020, there were warrants and pre-funded warrants outstanding for the purchase of up to an aggregate of 703,099 shares of Common Stock, of which warrants and pre-funded warrants for the purchase of up to an aggregate of 672,835 shares of Common Stock were immediately exercisable, while warrants to purchase up to an aggregate of 30,264 shares of Common Stock were not exercisable until a future date.

#### **Registration Rights**

Certain holders of the Company’s outstanding warrants, including, but not limited to, warrants issued in connection with the February 2020 Private Placement and the March 2020 Private Placement, which are exercisable for an aggregate of 532,853 shares of Common Stock at prices ranging from \$6.40 to \$207.00, have registration rights which require the Company to file a registration statement to register the shares underlying such warrants.

Pursuant to the Preferred SPA, holders of shares of the Series A Preferred Stock have the right to require the Company to register the shares of Series A Preferred Stock as well as the shares of Common Stock underlying such shares and the warrant issued to Ms. Walsh in connection with the Preferred SPA within 180 days of the Closing Date (as defined in the Preferred SPA) on which purchasers have committed to purchase an aggregate of amount of Series A Preferred Stock with an aggregate stated value equal to or exceeding \$250,000.

In connection with the February 2020 Private Placement, the Company entered into a registration rights agreement with the investors in such private placement (the “February 2020 RRA”) pursuant to which the Company agreed to file a shelf registration statement on Form S-3 with the SEC on or prior to the 45<sup>th</sup> day following the applicable closing date of the February 2020 Private Placement covering the registration of all securities issued to such investors. Pursuant to the February 2020 RRA, the Company also granted such investors piggy-back registration rights with respect to the securities issued in connection with the February 2020 Private Placement.

In connection with the March 2020 Private Placement, the Company, as required, filed a Registration Statement on Form S-1 with the SEC on April 1, 2020, of which this Prospectus forms a part of Amendment No. 2 thereto, in order to address, among other things, the Company’s compliance with Nasdaq Listing Rule 5550(b)(1), and in the event that such offering closes on or prior to 45 days from the date of the March 2020 Purchase Agreement (a “Qualifying Offering”), the Company is obligated to file a registration statement on Form S-1 or Form S-3 with the SEC covering the resale of all shares of Common Stock issuable pursuant to the March 2020 Note and the March 2020 Warrant, respectively (the “Resale Registration Statement”), and to ensure such Resale Registration Statement is declared effective no later than 180 days following the closing date of the March 2020 Private Placement; provided, that if such Qualifying Offering does not close on or prior to 45 days from the date of the March 2020 Purchase Agreement, the Company shall file the Resale Registration Statement immediately following such 45-day period. Pursuant to the March 2020 Purchase Agreement, the Company has also granted the Investor piggy-back registration rights with respect to such underlying shares. Additionally, the Company has granted identical registration rights to Maxim Group LLC, the placement agent for the March 2020 Private Placement (“Maxim”), with respect to the shares of Common Stock underlying a warrant issued to Maxim as partial consideration for serving as placement agent in connection with the March 2020 Private Placement.

## **Anti-Takeover Provisions**

### *Anti-Takeover Statute*

We are subject to Section 203 of the DGCL, which generally prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that 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 began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (1) by persons who are directors and also officers and (2) 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
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- 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 involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

#### ***Anti-Takeover Effects of Certain Provisions of our Bylaws***

Our bylaws provide that directors may be removed by the stockholders with or without cause upon the vote of a majority of the holders of Common Stock then entitled to vote. Furthermore, the authorized number of directors may be changed only by resolution of the board of directors or of the stockholders, and vacancies may only be filled by a majority vote of the directors, including those who may have resigned. Except as otherwise provided in the bylaws and the certificate of incorporation, as amended, any vacancies or newly created directorships on the board of directors resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class may be filled by a majority of the directors then in office, although less than a quorum, or by a sole remaining director.

Our bylaws also provide that only our chairman of the Board, chief executive officer, president or one or more stockholders holding shares in the aggregate entitled to cast not less than ten percent of the votes at that meeting may call a special meeting of stockholders.

The combination of these provisions makes it more difficult for our existing stockholders to replace our Board as well as for another party to obtain control of us by replacing our Board. Since our Board has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our Board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change our control.

These provisions are intended to enhance the likelihood of continued stability in the composition of our Board and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our Common Stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our Company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

#### **Transfer Agent and Registrar**

The transfer agent and registrar for our Common Stock is VStock Transfer, LLC.

#### **Nasdaq Listing**

Our Common Stock is listed on the Nasdaq Capital Market under the symbol “WISA.”

## DESCRIPTION OF SECURITIES THAT WE ARE OFFERING

We are offering (i) 1,226,415 shares of our Common Stock and (ii) Warrants to purchase up to an aggregate of 1,226,415 shares of our Common Stock (excluding the over-allotment option granted to the underwriters), which number of shares of Common Stock and Warrants are based on an assumed public offering price of \$5.30 per share, which is the last reported sale price of our Common Stock on Nasdaq on April 17, 2020. Each share of our Common Stock is being sold together with a Warrant to purchase one share of our Common Stock. The shares of our Common Stock accompanying Warrants will be issued separately. We are also registering the shares of our Common Stock issuable from time to time upon exercise of the Warrants offered hereby.

### Common Stock

The material terms and provisions of our Common Stock and each other class of our securities that qualifies or limits our Common Stock are described in the section entitled “Description of Securities” in this prospectus.

### Warrants

The following summary of certain terms and provisions of the Warrants offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the warrant agent agreement between us and VStock Transfer, LLC, as warrant agent, and the form of Warrant, both of which are filed as exhibits to the registration statement of which this prospectus is a part. Prospective investors should carefully review the terms and provisions set forth in the warrant agent agreement, including the annexes thereto, and form of Warrant.

*Form.* Pursuant to a warrant agent agreement between us and VStock Transfer, LLC, as warrant agent, the Warrants will be issued in book-entry form and shall initially be represented only by one or more global warrants deposited with the warrant agent, as custodian on behalf of The Depository Trust Company, or DTC, and registered in the name of Cede & Co., a nominee of DTC, or as otherwise directed by DTC.

*Exercisability.* The Warrants are exercisable at any time after their original issuance, expected to be April , 2020, and at any time up to the date that is five years after their original issuance. The Warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and, at any time a registration statement registering the issuance of the shares of Common Stock underlying the Warrants under the Securities Act is effective and available for the issuance of such shares, or an exemption from registration under the Securities Act is available for the issuance of such shares, by payment in full in immediately available funds for the number of shares of Common Stock purchased upon such exercise. If a registration statement registering the issuance of the shares of Common Stock underlying the Warrants under the Securities Act is not effective or available and an exemption from registration under the Securities Act is not available for the issuance of such shares, the holder may, in its sole discretion, elect to exercise the Warrant through a cashless exercise, in which case the holder would receive upon such exercise the net number of shares of Common Stock determined according to the formula set forth in the Warrant. No fractional shares of Common Stock will be issued in connection with the exercise of a Warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price.

*Exercise Limitation.* A holder will not have the right to exercise any portion of the Warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, upon election of the holder, 9.99%) of the number of shares of our Common Stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. However, any holder may increase or decrease such percentage, provided that any increase will not be effective until the 61<sup>st</sup> day after such election.

*Exercise Price.* The Warrants will have an exercise price of \$ per share, which is 100% of the public offering price per share of our Common Stock in this offering. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our Common Stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

*Transferability.* Subject to applicable laws, the warrants may be offered for sale, sold, transferred or assigned without our consent.

*Exchange Listing.* There is no established trading market for the Warrants and we do not expect a market to develop. In addition, we do not intend to apply for the listing of the Warrants on any national securities exchange or other trading market. Without an active trading market, the liquidity of the Warrants will be limited.

*Fundamental Transactions.* If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the Warrants with the same effect as if such successor entity had been named in the Warrant itself. If holders of our Common Stock are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of the Warrant following such fundamental transaction.

*Rights as a Stockholder.* Except as otherwise provided in the Warrants or by virtue of such holder's ownership of shares of our Common Stock, the holder of a Warrant does not have the rights or privileges of a holder of our Common Stock, including any voting rights, until the holder exercises the Warrant.

#### **Pre-Funded Warrants**

The following summary of certain terms and provisions of Pre-Funded Warrants that are being offered hereby is not complete and is subject to, and qualified in its entirety by, the provisions of the Pre-Funded Warrant, the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of Pre-Funded Warrant for a complete description of the terms and conditions of the Pre-Funded Warrants.

##### *Duration and Exercise Price*

Each Pre-Funded Warrant offered hereby will have an initial exercise price per share equal to \$0.01. The Pre-Funded Warrants will be immediately exercisable and may be exercised at any time until the Pre-Funded Warrants are exercised in full. The exercise price and number of shares of Common Stock issuable upon exercise is subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock and the exercise price.

##### *Exercisability*

The Pre-Funded Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our Common Stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of the Pre-Funded Warrant to the extent that the holder would own more than 4.99% (or at the election of the holder, 9.99%) of the outstanding shares of Common Stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's Pre-Funded Warrants. No fractional shares of Common Stock will be issued in connection with the exercise of a Pre-Funded Warrant. In lieu of fractional shares of Common Stock, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price of such Pre-Funded Warrant.

##### *Cashless Exercise*

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of Common Stock determined according to a formula set forth in the Pre-Funded Warrants.

##### *Fundamental Transaction*

In the event of a fundamental transaction, as described in the Pre-Funded Warrants and generally including any reorganization, recapitalization or reclassification of our Common Stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding shares of Common Stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding shares of Common Stock, the holders of the Pre-Funded Warrants will be entitled to receive upon exercise of the Pre-Funded Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Pre-Funded Warrants immediately prior to such fundamental transaction.

##### *Transferability*

Subject to applicable laws, a Pre-Funded Warrant may be transferred at the option of the holder upon surrender of the Pre-Funded Warrant to us together with the appropriate instruments of transfer.

##### *Exchange Listing*

We do not intend to list the Pre-Funded Warrants on any securities exchange or nationally recognized trading system.

##### *Rights as a Stockholder*

Except as otherwise provided in the Pre-Funded Warrants or by virtue of such holder's ownership of shares of our Common Stock, the holders of the Pre-Funded Warrants do not have the rights or privileges of holders of our Common Stock, including any voting rights, until they exercise their Pre-Funded Warrants.

#### **Underwriters' Warrants**

Please see "Underwriting — Underwriters' Warrants" for a description of the warrants that we have agreed to issue to Maxim Group LLC, as the representative of the underwriters in this offering, subject to the completion of the offering. We expect to enter into a warrant agreement in respect of the Underwriters' Warrants prior to the closing of this offering.

## **MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO HOLDERS OF COMMON STOCK AND WARRANTS**

The following is a summary of the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our Common Stock and the Pre-Funded Warrants, and the acquisition, ownership, exercise, expiration or disposition of the Warrants, but does not purport to be a complete analysis of all the potential tax considerations relating thereto. This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, administrative rulings and judicial decisions, all as of the date hereof. These authorities may be changed or subject to differing interpretations, possibly with retroactive effect, so as to result in U.S. federal income tax consequences different from those set forth below. We have not sought and will not seek any ruling from the Internal Revenue Service, or the IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This summary also does not address the tax considerations arising under the laws of any U.S. state or local or any non-U.S. jurisdiction, estate or gift tax, the 3.8% Medicare tax on net investment income or any alternative minimum tax consequences. In addition, this discussion does not address tax considerations applicable to a holder's particular circumstances or to a holder that may be subject to special tax rules, including, without limitation:

- banks, insurance companies or other financial institutions;
- tax-exempt or government organizations;
- brokers or dealers in securities or currencies;
- traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
- persons that own, or are deemed to own, more than five percent of our capital stock;
- certain U.S. expatriates, citizens or former long-term residents of the United States;
- persons who hold our shares of Common Stock and Pre-Funded Warrants or Warrants as a position in a hedging transaction, "straddle," "conversion transaction," synthetic security, other integrated investment, or other risk reduction transaction;
- persons who do not hold our Common Stock and Pre-Funded Warrants or Warrants as a capital asset within the meaning of Section 1221 of the Code (generally, for investment purposes);
- persons deemed to sell our Common Stock and Pre-Funded Warrants or Warrants under the constructive sale provisions of the Code;
- pension plans;
- partnerships, or other entities or arrangements treated as partnerships for U.S. federal income tax purposes, or investors in any such entities;
- persons for whom our stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code;
- integral parts or controlled entities of foreign sovereigns;
- controlled foreign corporations;
- passive foreign investment companies and corporations that accumulate earnings to avoid U.S. federal income tax; or
- persons that acquire our Common Stock or Pre-Funded Warrants or Warrants as compensation for services.

In addition, if a partnership, including any entity or arrangement classified as a partnership for U.S. federal income tax purposes, holds our Common Stock and Pre-Funded Warrants or Warrants, the tax treatment of a partner generally will depend on the status of the partner, the activities of the partnership, and certain determinations made at the partner level. Accordingly, partnerships that hold our Common Stock and Pre-Funded Warrants or Warrants, and partners in such partnerships, should consult their tax advisors regarding the U.S. federal income tax consequences to them of the purchase, ownership, and disposition of our Common Stock and Pre-Funded Warrants or Warrants.

You are urged to consult your tax advisor with respect to the application of the U.S. federal income tax laws to your particular situation, as well as any tax consequences of the purchase, ownership and disposition of our Common Stock and Pre-Funded Warrants or Warrants arising under the U.S. federal estate or gift tax rules or under the laws of any U.S. state or local or any non-U.S. or other taxing jurisdiction or under any applicable tax treaty.

### **Definition of a U.S. Holder**

For purposes of this summary, a "U.S. Holder" is any beneficial owner of our Common Stock and Pre-Funded Warrants or Warrants that is a "U.S. person," and is not a partnership, or an entity treated as a partnership or disregarded from its owner, each for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

For purposes of this summary, a "Non-U.S. Holder" is any beneficial owner of our Common Stock and Pre-Funded Warrants or Warrants that is not a U.S. Holder or a partnership, or other entity treated as a partnership or disregarded from its owner, each for U.S. federal income tax purposes.

### **Treatment of Pre-Funded Warrants**

Although it is not entirely free from doubt, a Pre-Funded Warrant should be treated as a share of our Common Stock for U.S. federal income tax purposes and a holder of Pre-Funded Warrants should generally be taxed in the same manner as a holder of Common Stock, as described below. Accordingly, no gain or loss should be recognized upon the exercise of a Pre-Funded Warrant and, upon exercise, the holding period of a Pre-Funded Warrants should carry over to the share of Common Stock received. Similarly, the tax basis of the Pre-Funded Warrant should carry over to the share of Common Stock received upon exercise, increased by the exercise price of \$0.01. Each holder should consult his, her or its own tax advisor regarding the risks associated with the acquisition of Pre-Funded Warrants pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

### **Tax Consequences to U.S. Holders**

#### ***Distributions on Common Stock***

As discussed above under "*Dividend Information – Dividend Policy*," we do not currently expect to make distributions on our Common Stock. In the event that we do make distributions of cash or other property, distributions paid on Common Stock, other than certain pro rata distributions of Common Stock, will be treated as a dividend to the

extent paid out of our current or accumulated earnings and profits and will be includible in income by the U.S. Holder and taxable as ordinary income when received. If a distribution exceeds our current and accumulated earnings and profits, the excess will be first treated as a tax-free return of the U.S. Holder's investment, up to the U.S. Holder's tax basis in the Common Stock. Any remaining excess will be treated as a capital gain. Subject to applicable limitations, dividends paid to certain non-corporate U.S. Holders may be eligible for taxation as "qualified dividend income" and therefore may be taxable at rates applicable to long-term capital gains. U.S. Holders should consult their tax advisers regarding the availability of the reduced tax rate on dividends in their particular circumstances. Dividends received by a corporate U.S. Holder will be eligible for the dividends-received deduction if the U.S. Holder meets certain holding period and other applicable requirements.

#### ***Constructive Dividends on Warrants***

Under Section 305 of the Code, an adjustment to the number of shares of Common Stock that will be issued on the exercise of the Warrants, or an adjustment to the exercise price of the Warrants, may be treated as a constructive distribution to a U.S. Holder of the Warrants if, and to the extent that, such adjustment has the effect of increasing such U.S. Holder's proportionate interest in our "earnings and profits" or assets, depending on the circumstances of such adjustment (for example, if such adjustment is to compensate for a distribution of cash or other property to our stockholders). Adjustments to the exercise price of a Warrant made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing dilution of the interest of the holders of the Warrants should generally not result in a constructive distribution. Any constructive distributions would generally be subject to the tax treatment described above under "Dividends on Common Stock."

#### ***Sale or Other Disposition of Common Stock***

For U.S. federal income tax purposes, gain or loss realized on the sale or other disposition of Common Stock will be capital gain or loss, and will be long-term capital gain or loss if the U.S. Holder held the Common Stock for more than one year. The amount of the gain or loss will equal the difference between the U.S. Holder's tax basis in the Common Stock disposed of and the amount realized on the disposition. Long-term capital gains recognized by non-corporate U.S. Holders will be subject to reduced tax rates. The deductibility of capital losses is subject to limitations.

#### ***Sale or Other Disposition, Exercise or Expiration of Warrants***

For U.S. federal income tax purposes, gain or loss realized on the sale or other disposition of a Warrant (other than by exercise) will be capital gain or loss and will be long-term capital gain or loss if the U.S. Holder held the Warrant for more than one year at the time of the sale or other disposition. The amount of the gain or loss will equal the difference between the U.S. Holder's tax basis in the Warrant disposed of and the amount realized on the disposition.

In general, a U.S. Holder will not be required to recognize income, gain or loss upon the exercise of a Warrant by payment of the exercise price, except to the extent of cash paid in lieu of a fractional share. A U.S. Holder's tax basis in a share of Common Stock received upon exercise will be equal to the sum of (1) the U.S. Holder's tax basis in the Warrant and (2) the exercise price of the Warrant. A U.S. Holder's holding period in the stock received upon exercise will commence on the day or the day after such U.S. Holder exercises the Warrant. No discussion is provided herein regarding the U.S. federal income tax treatment on the exercise of a Warrant on a cashless basis, and U.S. Holders are urged to consult their tax advisors as to the exercise of a Warrant on a cashless basis.

If a Warrant expires without being exercised, a U.S. Holder will recognize a capital loss in an amount equal to such U.S. Holder's tax basis in the Warrant. This loss will be long-term capital loss if, at the time of the expiration, the U.S. Holder's holding period in the Warrant is more than one year. The deductibility of capital losses is subject to limitations.

#### **FOR NON-U.S. HOLDERS**

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined herein) with respect to their ownership and disposition of shares of our Common Stock and Warrants issued pursuant to this offering. All prospective non-U.S. holders of our Common Stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our Common Stock. In general, a non-U.S. holder means a beneficial owner of our Common Stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing U.S. Treasury Regulations promulgated thereunder, published administrative pronouncements and rulings of the U.S. Internal Revenue Service, which we refer to as the IRS, and judicial decisions, all as in effect as of the date of this prospectus. These authorities are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus.

We assume in this discussion that a non-U.S. holder holds shares of our Common Stock and Warrants as a capital asset within the meaning of Section 1221 of the Code (generally, for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any alternative minimum, Medicare contribution, estate or gift tax consequences, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, holders who hold or receive our Common Stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our Common Stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction or other integrated investment, holders deemed to sell our Common Stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies and certain former U.S. citizens or former long-term residents.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their Common Stock through such partnerships. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our Common Stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. Such partners and partnerships should consult their tax advisors regarding the tax consequences of the purchase, ownership and disposition of our Common Stock or Warrants.

There can be no assurance that a court or the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, a ruling with respect to the U.S. federal income tax consequences to a non-U.S. holder of the purchase, ownership or disposition of our Common Stock.

## Distributions

As discussed in the section entitled “*Dividend Policy*,” we do not anticipate paying any dividends on our Common Stock in the foreseeable future. If we make distributions on our Common Stock or on the Warrants (as described above under “*Constructive Dividends on Warrants*”), those payments will constitute dividends for U.S. federal income tax purposes to the extent we have current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those distributions exceed both our current and our accumulated earnings and profits, they will constitute a return of capital and will first reduce a Non-U.S. Holder’s basis in our Common Stock or the Warrants, as applicable, but not below zero. Any excess will be treated as capital gain and will be treated as described below under “*Gain on Sale or Other Disposition of Common Stock or Warrants*.” Any such distributions would be subject to the discussions below regarding back-up withholding and the Foreign Account Tax Compliance Act, or FATCA.

Subject to the discussion below on effectively connected income, any dividend paid to a Non-U.S. Holder generally will be subject to U.S. withholding tax either at a rate of 30% of the gross amount of the dividend or such lower rate as may be specified by an applicable income tax treaty. To receive a reduced treaty rate, a Non-U.S. Holder must provide us or our agent with an IRS Form W-8BEN, IRS Form W-8 BEN-E or another appropriate version of IRS Form W-8 (or a successor form), which must be updated periodically, and which, in each case, must certify qualification for the reduced rate. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

Dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States and that are not eligible for relief from U.S. (net basis) income tax under an applicable income tax treaty generally are exempt from the (gross basis) withholding tax described above. To obtain this exemption from withholding tax, the Non-U.S. Holder must provide the applicable withholding agent with an IRS Form W-8ECI or successor form or other applicable IRS Form W-8 certifying that the dividends are effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States. Such effectively connected dividends, if not eligible for relief under a tax treaty, would not be subject to a withholding tax, but would be taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits and if, in addition, the Non-U.S. Holder is a corporation, may also be subject to a branch profits tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty).

If you are eligible for a reduced rate of withholding tax pursuant to a tax treaty, you may be able to obtain a refund of any excess amounts withheld if you timely file an appropriate claim for refund with the IRS.

### ***Exercise or Expiration of Warrants***

In general, a Non-U.S. Holder will not be required to recognize income, gain or loss upon the exercise of a Warrant by payment of the exercise price, except possibly to the extent of cash paid in lieu of a fractional share. However, no discussion is provided herein regarding the U.S. federal income tax treatment on the exercise of a Warrant on a cashless basis, and Non-U.S. Holders are urged to consult their tax advisors as to the exercise of a Warrant on a cashless basis.

If a Warrant expires without being exercised, a Non-U.S. Holder that is engaged in a U.S. trade or business to which any income from the Warrant would be effectively connected or who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the expiration occurs (and certain other conditions are met) will recognize a capital loss in an amount equal to such Non-U.S. Holder’s tax basis in the Warrant. The amount paid to purchase our Common Stock and Warrants will be apportioned between them in proportion to the respective fair market values of the Common Stock and Warrants, and the apportioned amount will be the tax basis of the Common Stock and Warrants respectively. The fair market value of our Common Stock for this purpose will generally be its trading value immediately after issuance.

### **Gain on Sale, Exchange or Other Disposition of Our Common Stock or Warrants**

Subject to the discussion below regarding backup withholding and FATCA, a Non-U.S. Holder generally will not be required to pay U.S. federal income tax on any gain realized upon the sale or other disposition of our Common Stock or the Warrants unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States and not eligible for relief under an applicable income tax treaty, in which case the Non-U.S. Holder will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates, and for a Non-U.S. Holder that is a corporation, such Non-U.S. Holder may be subject to the branch profits tax at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items;
- the Non-U.S. Holder is an individual who is present in the United States for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case the Non-U.S. Holder will be required to pay a flat 30% tax on the gain derived from the sale, which tax may be offset by U.S. source capital losses (even though the Non-U.S. Holder is not considered a resident of the United States) (subject to applicable income tax or other treaties); or
- we are a "U.S. real property holding corporation" for U.S. federal income tax purposes, or a USRPHC, at any time within the shorter of the five-year period preceding the disposition or the Non-U.S. Holder's holding period for our Common Stock or the Warrants. We believe we are not currently and do not anticipate becoming a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our United States real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, however, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our Common Stock will not be subject to United States federal income tax if (A) in the case of our Common Stock, (a) shares of our Common Stock are "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, such as Nasdaq, and (b) the Non-U.S. Holder owns or owned, actually and constructively, 5% or less of the shares of our Common Stock throughout the five-year period ending on the date of the sale or exchange; and (B) in the case of the Warrants, either (a)(i) shares of our Common Stock are "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, such as Nasdaq, (ii) the Warrants are not considered regularly traded on an established securities market and (iii) the Non-U.S. Holder does not own, actually or constructively, Warrants with a fair market value greater than the fair market value of 5% of the shares of our Common Stock, determined as of the date that such Non-U.S. Holder acquired its Warrants, or (b)(i) the Warrants are considered regularly traded on an established securities market, and (ii) the Non-U.S. Holder owns or owned, actually and constructively, 5% or less of the Warrants throughout the five-year period ending on the date of the sale or exchange. The Warrants are not expected to be regularly traded on an established securities market. If the foregoing exception does not apply, and we are a USRPHC, such Non-U.S. Holder's proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

#### Backup Withholding and Information Reporting

Information returns may be filed with the IRS in connection with distributions on our Common Stock or constructive dividends on the Warrants, and the proceeds of a sale or other disposition of the Common Stock or the Warrants. A non-exempt U.S. Holder may be subject to U.S. backup withholding on these payments if it fails to provide its taxpayer identification number to the withholding agent and comply with certification procedures or otherwise establish an exemption from backup withholding.

A Non-U.S. Holder may be subject to U.S. information reporting and backup withholding on these payments unless the Non-U.S. Holder complies with certification procedures to establish that it is not a U.S. person (within the meaning of the Code). The certification requirements generally will be satisfied if the Non-U.S. Holder provides the applicable withholding agent with a statement on the applicable IRS Form W-8BEN or IRS Form W-8BEN-E (or suitable substitute or successor form), together with all appropriate attachments, signed under penalties of perjury, stating, among other things, that such Non-U.S. Holder is not a U.S. Person. Applicable Treasury Regulations provide alternative methods for satisfying this requirement. In addition, the amount of distributions on common stock or constructive dividends on common stock paid to a Non-U.S. Holder, and the amount of any U.S. federal tax withheld therefrom, must be reported annually to the IRS and the holder. This information may be made available by the IRS under the provisions of an applicable tax treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides.

Payment of the proceeds of the sale or other disposition of the Common Stock or the Warrants to or through a non-U.S. office of a U.S. broker or of a non-U.S. broker with certain specified U.S. connections generally will be subject to information reporting requirements, but not backup withholding, unless the Non-U.S. Holder certifies under penalties of perjury that it is not a U.S. person or an exemption otherwise applies. Payments of the proceeds of a sale or other disposition of the Common Stock or the Warrants to or through a U.S. office of a broker generally will be subject to information reporting and backup withholding, unless the Non-U.S. Holder certifies under penalties of perjury that it is not a U.S. person or otherwise establishes an exemption.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment generally will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

#### Foreign Account Tax Compliance Act

FATCA imposes withholding tax on certain types of payments made to foreign financial institutions and certain other non-U.S. entities. The legislation imposes a 30% withholding tax on dividends on, or, subject to the discussion of certain proposed Treasury Regulations below, gross proceeds from the sale or other disposition of, our Common Stock or the Warrants paid to a "foreign financial institution" or to certain "non-financial foreign entities" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements. If the country in which a payee is resident has entered into an "intergovernmental agreement" with the United States regarding FATCA, that agreement may permit the payee to report to that country rather than to the U.S. Department of the Treasury. The U.S. Treasury recently released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our Common Stock or the Warrants. In its preamble to such proposed Treasury Regulations, the U.S. Treasury stated that taxpayers may generally rely on the proposed regulations until final regulations are issued. Prospective investors should consult their own tax advisors regarding the possible impact of these rules on their investment in our Common Stock or the Warrants, and the possible impact of these rules on the entities through which they hold our Common Stock or the Warrants, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of this 30% withholding tax under FATCA.

THE PRECEDING DISCUSSION IS FOR GENERAL INFORMATION ONLY. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK AND WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

## UNDERWRITING

We have entered into an underwriting agreement, dated \_\_\_\_\_, 2020, with Maxim Group LLC (“Maxim”), as the representative of the several underwriters named below, with respect to the shares of Common Stock or Pre-Funded Warrants and the accompanying Warrants subject to this offering. Subject to certain conditions, we have agreed to sell to the underwriters, and the underwriters have severally agreed to purchase, the number of shares of Common Stock and the accompanying Warrants provided below opposite their respective names.

Underwriter	Number of Shares	Number of Pre-Funded Warrants	Number of Accompanying Warrants
Maxim Group LLC			
<b>Total</b>			

The underwriters are offering the shares of our Common Stock or Pre-Funded Warrants and accompanying Warrants subject to their acceptance of our Common Stock or Pre-Funded Warrants and accompanying Warrants from us and subject to prior sale. The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the shares of our Common Stock or Pre-Funded Warrants and related Warrants offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of our Common Stock or Pre-Funded Warrants and related Warrants if any such shares of our Common Stock or Pre-Funded Warrants and related Warrants are taken.

We have granted the underwriters an option for a period of 45 days from the date of this prospectus to purchase up to an additional 183,962 shares of Common Stock and/or Warrants to purchase up to an additional 183,962 shares of our Common Stock, at the assumed public offering price of \$5.30 per share of Common Stock, which is the last reported sale price of our Common Stock on Nasdaq on April 17, 2020, less the underwriting discount.

### Discounts and Expenses

We have agreed to pay the underwriters a cash fee equal to 8.0% of the gross proceeds raised in this offering. In addition, for a period of twelve months from the date of the underwriting agreement, if we receive any proceeds from any investor introduced to us by Maxim, subject to certain exceptions set forth therein, during the course of this offering, we will pay Maxim a cash fee equal to 8.0% of such proceeds. The underwriters have advised us that they propose to offer the shares of our Common Stock or Pre-Funded Warrants and related Warrants to the public at the respective public offering prices set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ \_\_\_\_\_ per share of our Common Stock or \$0.01 per Pre-Funded Warrant and related Warrants. After this offering, the public offering price and concession to dealers may be changed by Maxim. No such change shall change the amount of proceeds to be received by us as set forth on the cover page of this prospectus. The shares of our Common Stock or Pre-Funded Warrants and related Warrants are offered by the underwriters as stated herein, subject to receipt and acceptance by them and subject to their right to reject any order in whole or in part. The underwriters have informed us that they do not intend to confirm sales to any accounts over which they exercise discretionary authority.

The following table shows the public offering price, underwriting discount payable to the underwriters by us and proceeds before expenses to us, assuming both no exercise and full exercise of the underwriters’ option to purchase additional shares of Common Stock, Pre-Funded Warrants and/or Warrants. The underwriting commissions are equal to the combined public offering price per share, of Common Stock and related Warrants, or of Pre-Funded Warrants and related Warrants, less the amount per share the underwriters pay us for the shares of Common Stock or Pre-Funded Warrants and Warrants:

	Per Share and Accompanying Warrant	Per Pre-Funded Warrant and Accompanying Warrant	Total without Over-Allotment Option	Total with Over-Allotment Option <sup>(1)</sup>
Public offering price	\$	\$	\$	\$
Underwriting discount and commissions (8.0%) <sup>(2)</sup>	\$	\$	\$	\$
Proceeds, before expenses to us <sup>(3)</sup>	\$	\$	\$	\$

(1) Assumes exercise of the underwriters’ over-allotment to purchase shares of Common Stock and Warrants.

(2) The underwriters will receive an underwriting discount equal to 8.0% of the gross proceeds in this offering, other than any sales to an investor with whom we have a pre-existing relationship, for which the underwriters will receive an underwriting discount equal to 4.0%.

(3) Excluding the proceeds, if any, from the exercise of the Pre-Funded Warrants or the Warrants.

We have also agreed to reimburse the underwriters for reasonable out-of-pocket expenses not to exceed \$100,000 in the aggregate, including payment of its legal costs and expenses. We estimate that total expenses payable by us in connection with this offering, other than the underwriting discount referred to above, will be approximately \$280,000.

## **Indemnification**

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

## **Lock-up Agreements**

We, our officers, directors and certain holders of five percent (5%) or more of the outstanding shares of our Common Stock as of the date immediately prior to the effective date of this offering have agreed, subject to limited exceptions, for a period of 90 days after the closing of this offering, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of Common Stock or any securities convertible into or exchangeable for our Common Stock either owned as of the date of the underwriting agreement or thereafter acquired without the prior written consent of Maxim. Maxim may, in its sole discretion and at any time or from time to time before the termination of the lock-up period, without notice, release all or any portion of the securities subject to lock-up agreements.

## **Underwriters' Warrants**

We have agreed to issue to Maxim warrants (the "Underwriters' Warrants") to purchase up to a total of 61,320 shares of our Common Stock (5% of the shares of Common Stock and the shares of common stock issuable upon exercise of the Pre-Funded Warrants sold in this offering, excluding the over-allotment). The Underwriters' Warrants will be exercisable beginning 180 days following the effective date of the registration statement of which this prospectus is a part. The Underwriters' Warrants will be exercisable commencing 180 days following the effective date of the registration statement of which this prospectus is a part and will terminate five-years following the effective date of the registration statement of which this prospectus is a part in compliance with FINRA Rule 5110(f)(2)(G)(i). The Underwriters' Warrants are exercisable at a per share price equal to \$ per share, or 120% of the public offering price per share of Common Stock issued and sold in this offering. The Underwriters' Warrants have been deemed compensation by FINRA and are therefore subject to a 180-day lock-up pursuant to Rule 5110(g)(1) of FINRA. Maxim (or permitted assignees under Rule 5110(g)(1)) will not sell, transfer, assign, pledge, or hypothecate the Underwriters' Warrants or the shares of Common Stock underlying the Underwriters' Warrants, nor will they engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the Underwriters' Warrants or the shares of Common Stock underlying the Underwriters' Warrants for a period of 180 days from the effective date of this offering. In addition, the Underwriters' Warrants provide for registration rights upon request, in certain cases. The one demand registration right provided will terminate on the fifth anniversary of the effective date of the registration statement of which this prospectus is a part in compliance with FINRA Rule 5110(f)(2)(G)(iv). The piggyback registration rights provided will terminate on the seventh anniversary of the effective date of the registration statement of which this prospectus is a part in compliance with FINRA Rule 5110(f)(2)(G)(v). We will bear all fees and expenses for one demand registration right and unlimited piggyback registration rights attendant to registering the securities issuable on exercise of the Underwriters' Warrants other than underwriting commissions incurred and payable by the holders. The exercise price and number of shares issuable upon exercise of the Underwriters' Warrants may be adjusted in certain circumstances including in the event of a stock dividend, extraordinary cash dividend or our recapitalization, reorganization, merger or consolidation. However, the exercise price of the Underwriters' Warrants and the shares of Common Stock underlying the Underwriters' Warrants will not be adjusted for issuances of shares of Common Stock at a price below the warrant exercise price.

## **Right of First Refusal**

Upon the closing of the offering, for a period of twelve (12) months from such closing, Maxim is granted the right of first refusal to act as underwriting and book running manager and/or placement agent for any and all of our future public and private equity, equity-linked, convertible or debt offerings. If the gross proceeds of this offering are \$5,000,000 or more, then Maxim will be entitled to 100% of the underwriting economics in these future offerings. If the gross proceeds of this offering are less than \$5,000,000, then Maxim will be entitled to 50% of underwriting economics in such future offerings.

## **Price Stabilization, Short Positions and Penalty Bids**

In connection with this offering the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.
- Over-allotment involves sales by the underwriters of shares in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of the Common Stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. A naked short position occurs if the underwriters sell more shares than could be covered by the over-allotment option. This position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares in the open market after pricing that could adversely affect investors who purchase in this offering.
- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the Common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our Common Stock or preventing or retarding a decline in the market price of the Common Stock. As a result, the price of our Common Stock may be higher than the price that might otherwise exist in the open market. These transactions may be discontinued at any time.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our shares of Common Stock. In addition, neither we nor the underwriters make any representation that the underwriters will engage in these transactions or that any transaction, if commenced, will not be discontinued without notice.

#### **Electronic Distribution**

This prospectus in electronic format may be made available on websites or through other online services maintained by the underwriters, or by their affiliates. Other than this prospectus in electronic format, the information on the underwriters' websites and any information contained in any other websites maintained by the underwriters is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriters in their capacity as underwriters, and should not be relied upon by investors.

#### **Related Transactions**

On March 22, 2020, we entered into the March 2020 Purchase Agreement with an institutional investor pursuant to which we agreed to issue to the investor in the March 2020 Private Placement a senior secured convertible instrument in the principal amount of \$2,040,000 and a warrant to purchase shares of our common stock. Maxim served as the sole placement agent for us in connection with the March 2020 Private Placement. In connection with the March 2020 Private Placement, we entered into a placement agency agreement with Maxim and agreed to issue to Maxim a warrant to purchase up to an aggregate of 20,400 shares (subject to adjustment) of Common Stock (the "Placement Agent Warrant") at an exercise price of \$6.40 per share, which Placement Agent Warrant is exercisable at any time on or after September 19, 2020 and will expire on the fifth (5<sup>th</sup>) anniversary of its date of issuance, is subject to 4.99%/9.99% beneficial ownership limitations, and may be exercised on a cashless basis in the event that the shares of our common stock underlying the Placement Agent Warrant are not covered by a registration statement. In addition, the Placement Agent Warrant includes a registration rights provision granting Maxim the same registration rights granted to the investor. The Placement Agent Warrant provides that Maxim (or permitted assignees under Rule 5110(g)(1)) will not sell, transfer, assign, pledge, or hypothecate the Placement Agent Warrant or the shares of Common Stock underlying the Placement Agent Warrant, nor will they engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the Placement Agent Warrant or the shares of Common Stock underlying the Placement Agent Warrant for a period of 180 days from the initial issuance date of the Placement Agent Warrant.

Pursuant to the placement agency agreement, in consideration for Maxim acting as the placement agent for the March 2020 Private Placement, in addition to the Placement Agent Warrant, we agreed to pay Maxim a cash fee of \$136,000 and grant Maxim a nine-month right of first refusal following the consummation of the March 2020 Private Placement to act as sole book-running manager, underwriter or placement agent in connection with a subsequent public offering by us. See "Prospectus Summary—Recent Developments—March 2020 Senior Secured Convertible Promissory Note" for additional details regarding the March 2020 Private Placement.

From time to time, the underwriters and/or their respective affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services it has received and, may in the future receive, customary fees. Except for the services provided in connection with this offering and other than as described below, the underwriters have not provided any investment banking or other financial services during the 180-day period preceding the date of this prospectus.

#### ***Notice to Prospective Investors in Canada***

This prospectus constitutes an "exempt offering document" as defined in and for the purposes of applicable Canadian securities laws. No prospectus has been filed with any securities commission or similar regulatory authority in Canada in connection with the offer and sale of the securities. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this prospectus or on the merits of the securities and any representation to the contrary is an offense.

Canadian investors are advised that this prospectus has been prepared in reliance on section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (“NI 33-105”). Pursuant to section 3A.3 of NI 33-105, this prospectus is exempt from the requirement that the Company and the underwriter(s) provide Canadian investors with certain conflicts of interest disclosure pertaining to “connected issuer” and/or “related issuer” relationships that may exist between the Company and the underwriter(s) as would otherwise be required pursuant to subsection 2.1(1) of NI 33-105.

#### **Resale Restrictions**

The offer and sale of the securities in Canada is being made on a private placement basis only and is exempt from the requirement that the Company prepares and files a prospectus under applicable Canadian securities laws. Any resale of securities acquired by a Canadian investor in this offering must be made in accordance with applicable Canadian securities laws, which may vary depending on the relevant jurisdiction, and which may require resales to be made in accordance with Canadian prospectus requirements, pursuant to a statutory exemption from the prospectus requirements, in a transaction exempt from the prospectus requirements or otherwise under a discretionary exemption from the prospectus requirements granted by the applicable local Canadian securities regulatory authority. These resale restrictions may under certain circumstances apply to resales of the securities outside of Canada.

#### **Representations of Purchasers**

Each Canadian investor who purchases securities will be deemed to have represented to the Company, the underwriters and to each dealer from whom a purchase confirmation is received, as applicable, that the investor is (i) purchasing as principal, or is deemed to be purchasing as principal in accordance with applicable Canadian securities laws, for investment only and not with a view to resale or redistribution; (ii) an “accredited investor” as such term is defined in section 1.1 of National Instrument 45-106 *Prospectus Exemptions* or, in Ontario, as such term is defined in section 73.3(1) of the *Securities Act* (Ontario); and (iii) is a “permitted client” as such term is defined in section 1.1 of National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*.

#### **Taxation and Eligibility for Investment**

Any discussion of taxation and related matters contained in this prospectus does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a Canadian investor when deciding to purchase the securities and, in particular, does not address any Canadian tax considerations. No representation or warranty is hereby made as to the tax consequences to a resident, or deemed resident, of Canada of an investment in the securities or with respect to the eligibility of the securities for investment by such investor under relevant Canadian federal and provincial legislation and regulations.

#### **Rights of Action for Damages or Rescission**

Securities legislation in certain of the Canadian jurisdictions provides certain purchasers of securities pursuant to an offering memorandum (such as this prospectus), including where the distribution involves an “eligible foreign security” as such term is defined in Ontario Securities Commission Rule 45-501 *Ontario Prospectus and Registration Exemptions* and in Multilateral Instrument 45-107 *Listing Representation and Statutory Rights of Action Disclosure Exemptions*, as applicable, with a remedy for damages or rescission, or both, in addition to any other rights they may have at law, where the offering memorandum, or other offering document that constitutes an offering memorandum, and any amendment thereto, contains a “misrepresentation” as defined under applicable Canadian securities laws. These remedies, or notice with respect to these remedies, must be exercised or delivered, as the case may be, by the purchaser within the time limits prescribed under, and are subject to limitations and defenses under, applicable Canadian securities legislation. In addition, these remedies are in addition to and without derogation from any other right or remedy available at law to the investor.

## Language of Documents

Upon receipt of this document, each Canadian investor hereby confirms that it has expressly requested that all documents evidencing or relating in any way to the sale of the securities described herein (including for greater certainty any purchase confirmation or any notice) be drawn up in the English language only. *Par la réception de ce document, chaque investisseur canadien confirme par les présentes qu'il a expressément exigé que tous les documents faisant foi ou se rapportant de quelque manière que ce soit à la vente des valeurs mobilières décrites aux présentes (incluant, pour plus de certitude, toute confirmation d'achat ou tout avis) soient rédigés en anglais seulement.*

## Offers Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

## LEGAL MATTERS

Sullivan & Worcester LLP of New York, New York will pass upon the validity of the securities offered hereby. Maxim Group LLC is being represented by Gracin & Marlow, LLP, New York, New York in connection with the offering.

## EXPERTS

The consolidated financial statements of Summit Wireless Technologies, Inc. as of December 31, 2019 and 2018 and for each of the two years in the period ended December 31, 2019 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2019 have been so incorporated in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) of BPM LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our Common Stock, Pre-Funded Warrants and Warrants being offered by this prospectus, which constitutes a part of the registration statement. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the shares of our Common Stock, Pre-Funded Warrants and Warrants offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement.

We are subject to the information reporting requirements of the Exchange Act, and we file reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the internet at the SEC's website at [www.sec.gov](http://www.sec.gov). We also maintain a website at [www.summitwireless.com](http://www.summitwireless.com), at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. **However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our Common Stock in this offering.**

## INCORPORATION BY REFERENCE

We incorporated by reference the filed documents listed below (excluding those portions of any Current Report on Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K), except as superseded, supplemented or modified by this prospectus or any subsequently filed document incorporated by reference herein as described below:

- our [Annual Report on Form 10-K for the fiscal year ended December 31, 2019](#) filed with the SEC on March 25, 2020;
- our [Definitive Proxy Statement on Schedule 14A for our special meeting of stockholders held on March 31, 2020](#) filed with the SEC on March 9, 2020;
- our Current Reports on Form 8-K filed with the SEC on [February 12, 2020](#), [March 3, 2020](#), [March 26, 2020](#), April 3, 2020 and April 8, 2020; and
- our registration statement on Form 8-A filed with the SEC on [July 25, 2018](#).

We incorporate by reference in this prospectus any future filings we make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act (excluding any information furnished and not filed with the SEC) after the date on which the registration statement that includes this prospectus was initially filed with the SEC (including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement) and until all offerings under this prospectus are terminated.

Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for all purposes to the extent that a statement contained in this prospectus or in any other subsequently filed document which is also incorporated or deemed to be incorporated by reference, modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. You may request a copy of these filings (other than an exhibit to a filing unless that exhibit is specifically incorporated by reference into that filing) at no cost by writing, telephoning or e-mailing us at the following address, telephone number or e-mail address:

Summit Wireless Technologies, Inc.  
6840 Via Del Oro, Ste. 280  
San Jose, CA 95119  
(408) 627-4716  
[info@summitwireless.com](mailto:info@summitwireless.com)

Copies of these filings are also available through the "Investor Relations" section of our website at [www.summitwireless.com](http://www.summitwireless.com). For other ways to obtain a copy of these filings, please refer to "Where You Can Find More Information" above.



**Summit Wireless Technologies, Inc.**

**1,226,415 Shares of Common Stock  
Common Warrants to Purchase up to 1,226,415 Shares of Common Stock  
Pre-funded Warrants to Purchase Shares of Common Stock  
Shares of Common Stock Underlying the Pre-funded Warrants**

**Prospectus**

**Maxim Group LLC**

*Through and including, 2020 (25 days after the date of this prospectus), all dealers that effect transactions in our securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.*

**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 13. Other Expenses of Issuance and Distribution**

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable in connection with the sale and distribution of the securities being registered. All amounts are estimated except the SEC registration fee and the FINRA filing fee. Except as otherwise noted, all the expenses below will be paid by us.

SEC registration fee	\$ 1,991.13
FINRA filing fee	\$ 2,311.25
Legal fees and expenses	\$ 200,000.00
Accounting fees and expenses	\$ 60,000.00
Printing and engraving expenses	\$ 12,000.00
Transfer agent and registrar fees and expenses	\$ 1,500.00
Miscellaneous fees and expenses	\$ 2,500.00
<b>Total</b>	<b>\$ 280,302.38</b>

**Item 14. Indemnification of Directors and Officers**

Section 145 of the DGCL ("Section 145") provides that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was illegal. A Delaware corporation may indemnify any persons who are, were or are a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the corporation's best interests, provided that no indemnification is permitted without judicial approval if the officer, director, employee or agent is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses which such officer or director has actually and reasonably incurred.

Section 145 further authorizes a corporation to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against any liability asserted against him and incurred by him in any such capacity, or arising out of his or her status as such, whether or not the corporation would otherwise have the power to indemnify him under Section 145.

Our bylaws provide that we must indemnify our directors and officers to the fullest extent permitted by the DGCL and must also pay expenses incurred in defending any such proceeding in advance of its final disposition upon delivery of an undertaking, by or on behalf of an indemnified person, to repay all amounts so advanced if it should be determined ultimately that such person is not entitled to be indemnified.

We have entered into indemnification agreements with certain of our executive officers and directors pursuant to which we have agreed to indemnify such persons against all expenses and liabilities incurred or paid by such person in connection with any proceeding arising from the fact that such person is or was an officer or director of our Company, and to advance expenses as incurred by or on behalf of such person in connection therewith.

The indemnification rights set forth above shall not be exclusive of any other right which an indemnified person may have or hereafter acquire under any statute, provision of our certificate of incorporation, as amended, our bylaws, agreement, vote of stockholders or disinterested directors or otherwise.

We maintain standard policies of insurance that provide coverage (1) to our directors and officers against loss rising from claims made by reason of breach of duty or other wrongful act and (2) to us with respect to indemnification payments that we may make to such directors and officers.

The proposed form of underwriting agreement filed as Exhibit 1.2 to this registration statement will provide for indemnification of our directors and officers by the underwriters party thereto against certain liabilities. See “Item 17. Undertakings” for a description of the SEC’s position regarding such indemnification provisions.

#### **Item 15. Recent Sales of Unregistered Securities**

All share and price per share information in Part II of this registration statement has been adjusted to reflect the Company’s one-for-twenty reverse stock split of its outstanding Common Stock, which became effective for the trading of its Common Stock on April 9, 2020:

During February 2016 through October 2016, the Company received total proceeds of \$2,880,000 from the issuance of original issue discount convertible notes (“Series C Convertible Notes”) to investors. On February 28, 2018, in connection with the extension of the maturity date of the Series C Convertible Note to August 28, 2018, the Company issued 17 shares of its common stock to a note holder.

Between November 2016 and July 2017, we completed a “best efforts” private offering with a group of accredited investors for the sale of 15% OID Senior Secured Convertible Promissory Notes, as amended (“Series D Convertible Notes”), in the aggregate principal amount of \$4,716,992 and warrants to purchase 51,147 shares of common stock, for total net proceeds to us of \$4,330,577, after deducting placement agent fees and other expenses. In addition, in connection with such offering, \$3,362,588 of other of our promissory notes (including \$2,855,000 of Series C Convertible Notes) and related accrued interest were converted to Series D Convertible Notes.

Between May 2017 and October 2017, we completed a “best efforts” private offering with MARCorp Signal, LLC, an accredited investor, for the sale of 15% OID Senior Secured Convertible Promissory Notes, as amended (“Series E Convertible Note”), in the aggregate principal amount of \$5,000,000 and warrants to purchase 130,724 shares of common stock, for total net proceeds to us of \$4,725,000, after deducting placement agent fees and other expenses. On July 25, 2018, in connection with a settlement agreement between the Company and MARCorp Signal, LLC, the Company issued to such holder a five-year warrant to purchase 24,394 shares of the Company’s common stock in partial consideration for the settlement of certain disputes with respect to the terms of transaction documents entered into between such parties in connection with the issuance of the Series E Convertible Notes.

Between November 2017 and May 25, 2018, we completed a “best efforts” private offering with a group of accredited investors for the sale of 15% Senior Secured Convertible Promissory Notes, as amended (“Series F Convertible Notes”), in the aggregate principal amount of \$10,570,000 and warrants to purchase 58,723 shares of common stock, for total net proceeds to us of \$9,624,700, after deducting placement agent fees and other expenses. The placement agents for the Series F Convertible Notes offering were issued five-year warrants to purchase 11,495 and 134 shares of common stock, exercisable at \$79.20 and \$72.00 per share, respectively.

Between April 20, 2018 and June 28, 2018, we completed a “best efforts” private offering with a group of accredited investors for the sale of 15% OID Senior Secured Promissory Notes, as amended (“Series G Notes”), in the aggregate principal amount of \$2,250,000, for total net proceeds to us of \$2,002,000, after deducting placement agent fees and other expenses. The aggregate principal amount of such notes included \$50,000 of expense reimbursements payable by the Company to Mr. Moyer that was converted to a Series G Note. On June 28, 2018, we and the holders of the Series G Notes agreed to extend the maturity date from June 30, 2018 to July 15, 2018 in consideration for increasing the original issue discount from 15% to 20% and the issuance of warrants to purchase an additional 10,418 shares of common stock. On July 20, 2018, the holders of the Series G Notes agreed to further extend the maturity date from July 15, 2018 to July 25, 2018, as well as to provide the holders the right to convert into shares of common stock and providing for mandatory conversion upon the Company’s IPO. In consideration for extending the maturity date and agreeing to convert the Series G Notes upon an IPO, the holders were granted warrants to purchase an additional 31,250 shares of common stock. The placement agent for the Series G Notes offering was issued five-year warrants to purchase 764 and 2,181 shares of common stock, exercisable at a \$66.00 and \$99.00 per share, respectively.

In connection with the termination of the Company’s Carve-Out Plan (the “Carve-Out Plan”) and the approval of the Company’s 2018 Long-Term Stock Incentive Plan on January 31, 2018, the Company’s board of directors approved the issuance to its employees and directors 64,224 and 7,657 shares of restricted common stock, respectively.

On July 25, 2018, in connection with the Company’s IPO, an aggregate of \$28,997,000 of principal under all of the Company’s outstanding convertible notes, and all accrued interest, were automatically converted into a total of 476,358 shares of common stock, at a conversion price of \$80.00 for the Series C Convertible Notes, \$75.00 for the Series D Convertible Notes, \$60.00 for the Series F Convertible Notes, \$40.00 for the Series G Notes, and at an average conversion price \$78.00 for all other outstanding convertible notes. On July 25, 2018, in connection with the Company’s IPO, holders of 138,130 shares of the Company’s preferred stock were automatically converted into a total of 138,130 shares of common stock at a ratio of 1-to-1.

On July 26, 2018, the Company issued 2,000 shares of restricted common stock to a consultant pursuant to a consulting agreement in consideration for providing business advisory services to the Company for a period of two months.

On August 7, 2018, the Company issued a three-year warrant to purchase 2,500 shares of common stock at a per share price of \$60.00 to a consultant pursuant to a consulting agreement in consideration for providing business advisory services to the Company for a period of three months.

On August 27, 2018, the Company issued 458 shares of restricted common stock to a consultant pursuant to a website development agreement in partial consideration for providing website development services to the Company in early 2018.

On September 25, 2018, the Company issued 1,000 shares of restricted common stock to a consultant pursuant to a media advertising agreement in partial consideration for providing certain media agent services to the Company for a period of 180 days.

On September 25, 2018, the Company issued 1,250 shares of restricted common stock to a consultant pursuant to a consulting agreement in consideration for providing certain consulting services to the Company for a period of one year.

On October 30, 2018, the Company issued a five-year warrant to purchase 2,000 shares of common stock at a per share price of \$99.00 to a consultant pursuant to a consulting agreement in consideration for providing investor and media agent services to the Company for a period of one year.

Pursuant to an agreement with Michael Howse, dated April 6, 2018, as amended effective as of December 27, 2018 (the "Howse Agreement"), in consideration for him serving as our interim chief strategy officer and as a member of our board of directors, the Company issued Mr. Howse (i) a warrant to purchase 5,500 shares of common stock, exercisable at a per share price of \$40.00, which is currently fully vested and (ii) a warrant to purchase 8,250 shares of common stock, exercisable at a per share price of \$40.00, which shall vest, so long as Mr. Howse continues to serve as interim chief strategy officer and/or as a member of our board of directors, (x) as to 5,500 shares of common stock upon the achievement of a significant milestone and (y) as to 2,750 shares of common stock upon the achievement of an additional significant milestone. The foregoing exercise prices are subject to adjustment as provided in each warrant, including without limitation, certain anti-dilution rights. Pursuant to the Howse Agreement, such warrants shall fully vest on the earlier of (1) immediately prior to a Fundamental Transaction, as defined in such agreement, (2) Mr. Howse's removal from our board of directors for any reason other than his resignation, his intentional illegal conduct or gross misconduct, or his conviction for any felony, theft, embezzlement or violent crime.

In connection with the Howse Agreement, the Company also granted Mr. Howse up to 20,000 deferred shares under the LTIP (the "Deferred Shares") pursuant to a Deferred Shares Agreement, entered into as January 4, 2019. Pursuant to such agreement, if a Fundamental Transaction (as defined in the Howse Agreement) has not occurred within 180 days of the earlier of the date on which Mr. Howse no longer serves (i) as the Company's interim chief strategy officer or (ii) on the Company's board of directors, all of the Deferred Shares shall be forfeited and Mr. Howse will have no further rights to such shares. Pursuant to such agreement, the Deferred Shares shall vest immediately prior to a Fundamental Transaction, and the number of Deferred Shares that shall vest is based on the Consideration (as defined in the Howse Agreement) paid for the Company in such transaction, which number of Deferred Shares that shall vest to double in the event that the Company does not incur General Expenses (as defined in the Howse Agreement).

Pursuant to a Securities Purchase Agreement, dated April 18, 2019 (the "Purchase Agreement"), the Company offered up to twelve tranches (each, a "Tranche"), (i) up to 1,250,000 shares of Series A 8% Senior Convertible Preferred Stock, par value \$0.0001 per share (the "Preferred Stock"), with a stated value of \$80.00 (the "Stated Value"), for an aggregate purchase price of up to \$5,000,000, and (ii) in each Tranche, warrants (the "Warrants") to purchase up to an aggregate of such number of shares of common stock determined by dividing the Stated Value of the Preferred Stock for such Tranche by the closing price of such common stock quoted on the Trading Market (as defined in the certificate of designations of the preferences, rights and limitations of the Preferred Stock (the "Certificate")) on the Trading Day (as defined in the Certificate) prior to the closing of such Tranche, multiplied by fifty percent (50%). In connection with the initial Tranche, the Company issued to a significant stockholder of the Company, 250,000 shares of Series A Preferred Stock and a warrant to purchase 12,756 shares of our common stock in consideration for \$1,000,000, and the Company also issued to Alexander Capital, L.P., the placement agent in connection with such offering, a warrant to purchase 2,041 shares of common stock.

Pursuant to the Certificate, the shares of Preferred Stock are convertible by the holders at any time, in whole or in part, by multiplying such shares by the ratio of the stated value by the conversion price of such shares, which is initially fixed at a price of \$80.00 per share (the "Fixed Conversion Price"), which price cannot be reduced below of \$30.00, and is subject to adjustment under the Certificate upon certain subsequent transactions and events described therein. In the event that the closing price of our common stock on a Trading Day as quoted on the Trading Market is less than the Fixed Conversion Price (subject to adjustment for reverse and forward stock splits and the like), the Fixed Conversion Price shall be reduced to equal 95% of the average of the lowest VWAP (as defined in the Certificate) out of the prior 10 consecutive Trading Days prior to the date on which the holder of Preferred Stock delivers a notice of conversion to the Company to convert such holder's Preferred Stock.

The Preferred Stock is subject to customary adjustments for any share dividend, share split, share combination, reclassification or similar transaction. Dividends are payable in cash or in kind to the holders of Preferred Stock at a rate of 8% per annum, payable upon conversion of the Preferred Stock. In addition, upon a Triggering Event (as defined in the Certificate), which includes any default by the Company in the payment of amounts owed to a holder on the Preferred Stock and other customary events of default under the Certificate, each holder of Preferred Stock has the right to require the Company to redeem each share of Preferred Stock held by such Holder for a redemption price equal to 120% of the Stated Value and all accrued but unpaid dividends on such shares in addition to the payment of all liquidated damages and other costs, expenses or amounts due in respect of the Preferred Stock.

The Warrants issued by the Company pursuant to the Purchase Agreement will represent 50% warrant coverage of the shares of Preferred Stock issued pursuant to each Tranche. The Warrants are immediately exercisable, have a five-year life and have an exercise price equal to the closing price of our common stock on the Trading Day prior to a Closing (as defined in the Purchase Agreement), plus \$0.40. The Warrant issued to Alexander Capital, L.P. in connection with the Purchase Agreement is exercisable for 110% of the exercise price of the Warrants issued to investors pursuant to the Purchase Agreement. The Warrants are subject to 4.99/9.99% blockers and subject to adjustment for stock dividends and splits.

Pursuant to the Purchase Agreement, (A) holders of the Preferred Stock have the right to require the Company to register the Preferred Stock and the shares of our common stock underlying the Preferred Stock and Warrants within 180 days of the Closing Date (as defined in the Purchase Agreement) on which purchasers have committed to purchase an aggregate amount of Preferred Stock with an aggregate Stated Value equal to or exceeding \$1,000,000; and (B) so long as (i) purchasers hold shares of Preferred Stock with an aggregate Stated Value equal to or exceeding \$250,000, holders of Preferred Stock have a right of first refusal with respect to a Subsequent Financing (as defined in the Purchase Agreement) effected by the Company, and (ii) purchasers hold shares of Preferred Stock with an aggregate Stated Value equal to or exceeding \$500,000 and a Subsequent Financing occurs, such holders have a right to tender such shares for the securities offered pursuant to such Subsequent Financing. Pursuant to the Certificate, the Purchase Agreement, and the Warrants, unless the Company obtains stockholder approval pursuant to the rules and regulations of Nasdaq, the Company cannot issue shares of common stock upon conversion of the Preferred Stock or exercise of the Warrant, as applicable, in the event that such issuance exceeds 19.99% of the issued and outstanding shares of common stock as of April 18, 2019.

On November 21, 2019, as a material inducement to George Oliva's acceptance of employment as the Company's Chief Financial Officer, the Company issued Mr. Oliva 7,500 shares of restricted stock of the Company (the "Stock Award"). The Stock Award was approved by the compensation committee of the Company's board of directors and such shares were issued in accordance with Nasdaq Listing Rule 5635(c)(4) outside of the LTIP. Pursuant to an amended and restated offer letter, dated October 4, 2019, such shares will vest equally over a period of four years, with the first tranche to vest on September 1, 2020, and in the event that Mr. Oliva is (i) terminated without cause within one year of a change in control of the Company (defined as over a 50% change in ownership of the Company) or (ii) his role is diminished as a result of such change in control, all incentive equity compensation granted to him will fully accelerate and vest.

On May 30, 2019, the Company issued 563 fully vested shares of restricted common stock to a consultant pursuant to an investor relations consulting agreement, in partial consideration for providing certain investor relations and financial media relations services to the Company for six months.

On May 30, 2019, the Company issued 264 fully vested shares of restricted common stock to a consultant pursuant to a consulting agreement in partial consideration for providing certain marketing services to WiSA, LLC, a Delaware limited liability company and one of the Company's wholly-owned subsidiaries, for an initial term of six months.

On May 30, 2019, the Company issued 1,500 fully vested shares of restricted common stock to a consultant pursuant to a consulting agreement, as amended, in partial consideration for providing certain investor relations services to the Company for a period of six months.

On June 26, 2019, the Company issued 5,000 shares of restricted common stock to a consultant pursuant to a consulting agreement in consideration for providing certain business advisory services to the Company in connection with its Public Offering.

On July 9, 2019, the Company granted a five-year warrant to purchase up to 2,000 shares of common stock to a consultant pursuant to a consulting agreement, in consideration for providing certain investor relations services. The warrant has an exercise price of \$24.80 per share and are fully exercisable.

On August 14, 2019, the Company granted a five-year warrant to purchase up to 2,500 shares of common stock to a consultant pursuant to a consulting agreement, in consideration for providing certain financial media relations services. The warrant has an exercise price of \$26.20 per share and are fully exercisable.

Between September 25, 2019 and October 8, 2019, the Company and certain holders (each a "Holder" and collectively, the "Holders") of the Company's common stock purchase warrants, with exercise prices between \$60.00 and \$108.00 (collectively, the "Original Warrants"), including the Company's Series D common stock purchase warrants, Series F common stock purchase warrants (the "Series F Warrants") and Series G common stock purchase warrants (the "Series G Warrants"), entered into Warrant Amendment and Exercise Agreements (the "Warrant Amendment Agreements"), pursuant to which the Company agreed to reduce the exercise price of each Original Warrant to \$16.00 (the "Reduced Exercise Price"), and for each Original Warrant exercised by a Holder at the Reduced Exercise Price, the Company agreed to reduce the exercise price of Original Warrants to purchase up to an equivalent number of shares of Common Stock (the "Amended Warrants") to \$15.80 (the "Amended Exercise Price"). The Company entered into Warrant Amendment Agreements with 32 Holders, under which Original Warrants were exercised for a total of 56,420 shares of Common Stock and the Company received gross proceeds of \$903,000. Remaining Original Warrants for 69,071 shares of Common Stock had their exercise price adjusted to the Amended Exercise Price of \$15.80.

Additionally, pursuant to the Warrant Amendment Agreements, the Company agreed to prepare and file with the SEC, as soon as practicable, but in no event later than November 4, 2019 (as extended by the Settlement Agreements (as defined below) to November 18, 2019), a registration statement on Form S-3 to register all shares of Common Stock received by the Holders upon exercise of any Warrant (as defined in the Warrant Amendment Agreements) and all shares of Common Stock underlying the Original Warrants (as defined in the Warrant Amendment Agreements) (such issued and underlying shares, the "Resale Shares").

From November 3, 2019 to November 6, 2019, the Company entered into settlement agreements (each a "Settlement Agreement" and collectively, the "Settlement Agreements") with each of the Holders (other than the Medalist Funds, whose Settlement Agreement is described below) pursuant to which the Company agreed to issue such Holders an aggregate of 7,648 additional shares of common stock, with such shares meant to compensate such Holders for the difference between the Amended Exercise Price and the lower priced shares that were offered to investors in connection with the Company's earlier registered direct offering of an aggregate of 125,000 shares of Common Stock, priced at \$14.00 per share, that the Company closed on October 16, 2019 (the "Registered Direct Offering"). In addition, pursuant to the Settlement Agreements, the Company and the Holders agreed to extend the date by which the Company would file a registration statement on Form S-3 to register all of the Resale Shares from November 4, 2019 to November 18, 2019.

On January 23, 2020, we entered into a funding agreement, as amended (the "Funding Agreement"), which provided for the issuance to an unaffiliated accredited investor of a convertible promissory note in the principal amount of \$111,100, reflecting a 10% original issue discount, 500 shares of our Common Stock and a five-year warrant exercisable for 7,936 shares of our Common Stock at an exercise price of \$9.80 per share in consideration for \$100,000, which was funded on January 24, 2020. Additionally, pursuant to the Funding Agreement, such investor was granted a most favored nation right. As of the date of this prospectus, the outstanding debt owed to such investor pursuant to the Funding Agreement has been fully repaid.

On February 28, 2020, the Company completed a private placement (the "February 2020 Private Placement") of \$835,000 of units (the "Units"), each consisting of (i) one (1) share of Common Stock and (ii) a warrant to purchase 0.50 of a share of Common Stock (the "February 2020 Warrants"), at a price per Unit of \$9.17. The Units were issued pursuant to a Unit Purchase Agreement, dated February 4, 2020, and a subscription agreement, dated February 28, 2020 by and among the Company and the purchasers signatory thereto. The February 2020 Private Placement, which was priced above market, resulted in gross proceeds of \$835,000 before fees and other expenses associated with the transaction. The proceeds of such offering are being used primarily toward increasing stockholders' equity in order to comply with Nasdaq Listing Rule 5550(b) and for general corporate purposes. The February 2020 Warrants are exercisable to purchase up to an aggregate of 45,320 shares of Common Stock commencing on the date of issuance at an exercise price of \$9.80 per share, subject to adjustment upon stock splits, reverse stock splits, and similar capital changes. The February 2020 Warrants are exercisable immediately and will expire on the close of business on February 28, 2025. The exercise of the February 2020 Warrants are subject to beneficial ownership limitations such that each holder of such February 2020 Warrant may exercise it to the extent that such exercise would result in such holder being the beneficial owner in excess of 4.99% (or, upon election of such holder, 9.99%), which beneficial ownership limitation may be increased or decreased up to 9.99% upon notice to the Company, provided that any increase in such limitation will not be effective until 61 days following notice to the Company.

On March 30, 2020, the Company completed a private placement (the “March 2020 Private Placement”) of a senior secured convertible instrument (the “March 2020 Note”) and a warrant (the “March 2020 Warrant”) to purchase 227,679 shares of Common Stock at an exercise price of \$6.40 per share. The March 2020 Note and March 2020 Warrant were issued pursuant to a securities purchase agreement (the “March 2020 Purchase Agreement”), entered into as of March 22, 2020, by and between the Company and an institutional investor (the “Investor”). The March 2020 Private Placement resulted in gross proceeds of \$1,700,000, before fees and other expenses associated with the transaction, including but not limited to, an \$85,000 commitment fee payable to the Investor. The net proceeds to be received by the Company in connection with the March 2020 Private Placement will be used primarily for working capital, debt repayment and general corporate purposes. Additionally, the Company agreed to issue to Maxim Group LLC, the placement agent for the March 2020 Private Placement, a warrant to purchase up to an aggregate of 20,400 shares of Common Stock, subject to adjustment, as partial consideration for serving as placement agent in connection with the March 2020 Private Placement.

The sale and the issuance of the foregoing notes, warrants and shares of Common Stock were offered and sold in reliance upon exemptions from registration pursuant to Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”) and Rule 506 of Regulation D promulgated under the Securities Act (“Regulation D”). We made this determination based on the representations of each investor which included, in pertinent part, that each such investor was either (a) an “accredited investor” within the meaning of Rule 501 of Regulation D or (b) a “qualified institutional buyer” within the meaning of Rule 144A under the Securities Act and upon such further representations from each investor that (i) such investor acquired the securities for his, her or its own account for investment and not for the account of any other person and not with a view to or for distribution, assignment or resale in connection with any distribution within the meaning of the Securities Act, (ii) such investor agreed not to sell or otherwise transfer the purchased securities unless they are registered under the Securities Act and any applicable state securities laws, or an exemption or exemptions from such registration are available, (iii) such investor had knowledge and experience in financial and business matters such that he, she or it was capable of evaluating the merits and risks of an investment in us, (iv) such investor had access to all of our documents, records, and books pertaining to the investment and was provided the opportunity to ask questions and receive answers regarding the terms and conditions of the offering and to obtain any additional information which we possessed or were able to acquire without unreasonable effort and expense, and (v) such investor had no need for the liquidity in its investment in us and could afford the complete loss of such investment. In addition, there was no general solicitation or advertising for securities issued in reliance upon these exemptions.

**Item 16. Exhibits and Financial Statement Schedules**

(a) Exhibits.

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
<a href="#">1.1</a>	<a href="#">Form of Placement Agency Agreement by and between the Company and the Placement Agent. (11)</a>
<a href="#">1.2*</a>	<a href="#">Form of Underwriting Agreement by and between the Company and Maxim Group LLC.</a>
<a href="#">2.1</a>	<a href="#">Certificate of Conversion of Summit Semiconductor, Inc. (2)</a>
<a href="#">2.2</a>	<a href="#">Plan of Conversion of Summit Semiconductor, Inc. (2)</a>
<a href="#">3.1(i)</a>	<a href="#">Certificate of Incorporation of Summit Semiconductor, Inc. (1)</a>
<a href="#">3.1(ii)</a>	<a href="#">Certificate of Amendment to Certificate of Incorporation of Summit Semiconductor, Inc. (3)</a>
<a href="#">3.1(iii)</a>	<a href="#">Certificate of Amendment to Certificate of Incorporation of Summit Semiconductor, Inc. (4)</a>
<a href="#">3.1(iv)</a>	<a href="#">Form of Certificate of Designations of the Preferences, Rights and Limitations of the Series A 8% Senior Convertible Preferred Stock. (10)</a>
<a href="#">3.1(v)</a>	<a href="#">Certificate of Amendment to Certificate of Incorporation of Summit Semiconductor, Inc. (12)</a>
<a href="#">3.2(i)</a>	<a href="#">Bylaws of Summit Semiconductor, Inc. (1)</a>
<a href="#">4.1</a>	<a href="#">Form of Common Stock Certificate. (6)</a>
<a href="#">4.2</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holders of Series D 15% Original Issue Discount Senior Secured Convertible Promissory Notes. (1)</a>
<a href="#">4.3</a>	<a href="#">Form of Amended and Restated Common Stock Purchase Warrant issued to holder of Series E Senior Secured Original Issue Discount Convertible Notes. (6)</a>
<a href="#">4.4</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holder of Series E Senior Secured Original Issue Discount Convertible Notes. (6)</a>
<a href="#">4.5</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holders of Series F Senior Secured 15% Convertible Notes. (1)</a>
<a href="#">4.6</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holders of Series G 15% Original Issue Discount Senior Secured Promissory Notes in June 2018. (1)</a>

<a href="#">4.7</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holders of Series G 20% Original Issue Discount Senior Secured Promissory Notes in July 2018. (2)</a>
<a href="#">4.8</a>	<a href="#">Amended and Restated Common Stock Purchase Warrant to purchase shares of Common Stock issued to Michael Howse on December 27, 2018. (6)</a>
<a href="#">4.9</a>	<a href="#">Amended and Restated Common Stock Purchase Warrant to purchase shares of Common Stock issued to Michael Howse on December 27, 2018. (6)</a>
<a href="#">4.10</a>	<a href="#">Form of Common Stock Purchase Warrant issued to holder of Series A 8% Senior Convertible Preferred Stock. (7)</a>
<a href="#">4.11</a>	<a href="#">Form of Pre-Funded Common Stock Purchase Warrant. (8)</a>
<a href="#">4.12</a>	<a href="#">Form of Amendment No. 1 to Series F Common Stock Purchase Warrant. (8)</a>
<a href="#">4.13</a>	<a href="#">Form of Common Stock Purchase Warrant, dated February 2020. (9)</a>
<a href="#">4.14</a>	<a href="#">Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934. (10)</a>
<a href="#">4.15</a>	<a href="#">Form of Senior Secured Convertible Instrument, dated March 2020. (11)</a>
<a href="#">4.16</a>	<a href="#">Form of Common Stock Purchase Warrant, dated March 2020. (11)</a>
<a href="#">4.17</a>	<a href="#">Form of Placement Agent Warrant, dated March 2020. (11)</a>
<a href="#">4.18**</a>	<a href="#">Form of Common Warrant.</a>
<a href="#">4.19**</a>	<a href="#">Form of Warrant Agent Agreement.</a>
<a href="#">4.20**</a>	<a href="#">Form of Underwriters' Warrant.</a>
<a href="#">4.21*</a>	<a href="#">Form of Pre-funded Warrant.</a>
<a href="#">5.1*</a>	<a href="#">Opinion of Sullivan &amp; Worcester LLP.</a>
<a href="#">10.1</a>	<a href="#">Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan. (1)</a>
<a href="#">10.2</a>	<a href="#">Form of Restricted Stock Agreement for Directors under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan. (1)</a>
<a href="#">10.3</a>	<a href="#">Form of Restricted Stock Agreement for Employees under the Summit Semiconductor, Inc. 2018 Long-Term Stock Incentive Plan. (1)</a>
<a href="#">10.4</a>	<a href="#">Form of Indemnity Agreement by and between Summit Semiconductor, Inc., and each of its directors and executive officers. (1)</a>
<a href="#">10.5</a>	<a href="#">Employment Agreement between FOCUS Enhancements, Inc. and Brett Moyer, dated August 6, 2002. (1)</a>
<a href="#">10.6</a>	<a href="#">First Amendment to Employment Agreement by and between Summit Semiconductor, LLC and Brett Moyer, effective May 2, 2011. (1)</a>
<a href="#">10.7</a>	<a href="#">Executive Employment Agreement between FOCUS Enhancements, Inc. and Gary Williams, dated May 28, 2004. (1)</a>
<a href="#">10.8</a>	<a href="#">First Amendment to Executive Employment Agreement by and between Summit Semiconductor, LLC and Gary Williams, effective May 2, 2011. (1)</a>
<a href="#">10.9</a>	<a href="#">Offer Letter from Summit Semiconductor, Inc. to Michael Howse, dated April 6, 2018. (1)</a>
<a href="#">10.10</a>	<a href="#">Amendment to Agreement, effective as of December 27, 2018, between Summit Wireless Technologies, Inc. and Michael Howse. (6)</a>
<a href="#">10.11</a>	<a href="#">Deferred Shares Agreement, entered into as of January 4, 2019, between Summit Wireless Technologies, Inc. and Michael Howse. (6)</a>
<a href="#">10.12</a>	<a href="#">Lease Agreement by and between Amberglen, LLC and Summit Semiconductor, Inc., dated June 11, 2015, as amended. (1)</a>
<a href="#">10.13</a>	<a href="#">First Amendment to Lease Agreement by and between Amberglen, LLC and Summit Semiconductor, Inc., dated July 31, 2018. (6)</a>

<a href="#"><u>10.14</u></a>	<a href="#"><u>Form of Securities Purchase Agreement between Summit Semiconductor, LLC and the purchasers of Series D 15% Original Issue Discount Senior Secured Convertible Promissory Notes. (1)</u></a>
<a href="#"><u>10.15</u></a>	<a href="#"><u>Form of Amendment to Series D Transaction Documents. (1)</u></a>
<a href="#"><u>10.16</u></a>	<a href="#"><u>Form of Securities Purchase Agreement by and among Summit Semiconductor, LLC and the purchasers of Series E Senior Secured Original Issue Discount Convertible Notes. (1)</u></a>
<a href="#"><u>10.17</u></a>	<a href="#"><u>Form of Consent, Amendment and Termination Agreement by and among Summit Semiconductor, LLC and certain purchasers of Series D 15% Original Issue Discount Senior Secured Convertible Promissory Notes on November 18, 2016. (1)</u></a>
<a href="#"><u>10.18</u></a>	<a href="#"><u>Form of Consent, Amendment and Termination Agreement by and among Summit Semiconductor, LLC and certain purchasers of Series D 15% Original Issue Discount Senior Secured Convertible Promissory Notes on November 30, 2016. (1)</u></a>
<a href="#"><u>10.19</u></a>	<a href="#"><u>Management Rights Letter, dated May 17, 2017, between Summit Semiconductor, LLC and MARCorp Signal, LLC. (1)</u></a>
<a href="#"><u>10.20</u></a>	<a href="#"><u>Settlement Agreement, dated July 25, 2018, between Summit Semiconductor, Inc. and MARCorp Signal, LLC. (5)</u></a>
<a href="#"><u>10.21</u></a>	<a href="#"><u>Form of Securities Purchase Agreement by and among Summit Semiconductor, LLC and the purchasers of Series F Senior Secured 15% Convertible Notes. (1)</u></a>
<a href="#"><u>10.22</u></a>	<a href="#"><u>Form of Amendment to Series F Transaction Documents. (2)</u></a>
<a href="#"><u>10.23</u></a>	<a href="#"><u>Form of Series G Subscription Agreement by and among Summit Semiconductor, Inc. and the purchasers of Series G 15% Original Issue Discount Senior Secured Promissory Notes. (1)</u></a>
<a href="#"><u>10.24</u></a>	<a href="#"><u>Form of Amendment to Series G Transaction Documents. (1)</u></a>
<a href="#"><u>10.25</u></a>	<a href="#"><u>Form of Securities Purchase Agreement, dated April 18, 2019, by and among Summit Wireless Technologies, Inc. and certain purchasers of Series A 8% Senior Convertible Preferred Stock. (10)</u></a>
<a href="#"><u>10.26</u></a>	<a href="#"><u>Form of Series F Warrant Amendment and Exercise Agreement by and between the Company and each of the Medalist Funds. (8)</u></a>
<a href="#"><u>10.27</u></a>	<a href="#"><u>Form of Series G Warrant Amendment and Exercise Agreement by and between the Company and each of the Medalist Funds. (8)</u></a>
<a href="#"><u>10.28</u></a>	<a href="#"><u>Form of Warrant Amendment and Exercise Agreement by and between the Company and certain other holders of the Company's common stock purchase warrants. (8)</u></a>
<a href="#"><u>10.29</u></a>	<a href="#"><u>Form of Warrant Settlement Agreement by and between the Company and certain holders of the Company's common stock purchase warrants. (8)</u></a>
<a href="#"><u>10.30</u></a>	<a href="#"><u>Form of Warrant Settlement Agreement by and between the Company and the Medalist Funds. (8)</u></a>
<a href="#"><u>10.31</u></a>	<a href="#"><u>Amended and Restated Offer Letter from Summit Wireless Technologies, Inc. to George Oliva, dated October 4, 2019. (10)</u></a>
<a href="#"><u>10.32</u></a>	<a href="#"><u>Form of Unit Purchase Agreement, dated February 2020, by and among the Company and the purchasers signatory thereto. (9)</u></a>
<a href="#"><u>10.33</u></a>	<a href="#"><u>Form of Subscription Agreement, dated February 2020, by and among the Company and the purchasers signatory thereto. (9)</u></a>
<a href="#"><u>10.34</u></a>	<a href="#"><u>Form of Securities Purchase Agreement, dated March 2020, by and between the Company and the Investor. (11)</u></a>
<a href="#"><u>10.35</u></a>	<a href="#"><u>Form of Security Agreement, dated March 2020, by and between the Company and the Investor. (11)</u></a>
<a href="#"><u>10.36</u></a>	<a href="#"><u>Form of Security Agreement, dated March 2020, by and between WiSA and the Investor. (11)</u></a>
<a href="#"><u>10.37</u></a>	<a href="#"><u>Form of Trademark Security Agreement, dated March 2020, by and between the Company and the Investor. (11)</u></a>
<a href="#"><u>10.38</u></a>	<a href="#"><u>Form of Trademark Security Agreement, dated March 2020, by and between WiSA and the Investor. (11)</u></a>
<a href="#"><u>10.39</u></a>	<a href="#"><u>Form of Patent Security Agreement, dated March 2020, between the Company and the Investor. (11)</u></a>
<a href="#"><u>10.40</u></a>	<a href="#"><u>Form of Pledge Agreement, dated March 2020, between the Company, WiSA and the Investor. (11)</u></a>
<a href="#"><u>10.41</u></a>	<a href="#"><u>Form of Guaranty, dated March 2020. (11)</u></a>
<a href="#"><u>21.1</u></a>	<a href="#"><u>List of Subsidiaries. (10)</u></a>
<a href="#"><u>23.1*</u></a>	<a href="#"><u>Consent of BPM LLP.</u></a>
<a href="#"><u>23.2*</u></a>	<a href="#"><u>Consent of Sullivan &amp; Worcester LLP (included in Exhibit 5.1).</u></a>

24.1\*      Power of Attorney (included on the signature page of this registration statement).

\* Filed herewith.  
\*\* Previously filed.

- (1) Filed as an Exhibit to the Company's Registration Statement on Form S-1/A (File No. 333-224267) with the SEC on July 2, 2018.
  - (2) Filed as an Exhibit to the Company's Registration Statement on Form S-1/A (File No. 333-224267) with the SEC on July 23, 2018.
  - (3) Filed as an Exhibit to the Company's Registration Statement on Form S-1/A (File No. 333-224267) with the SEC on July 25, 2018.
  - (4) Filed as an Exhibit to the Company's Current Report on Form 8-K with the SEC on September 14, 2018.
  - (5) Filed as an Exhibit to the Company's Quarterly Report on Form 10-Q with the SEC on November 15, 2018.
  - (6) Filed as an Exhibit to the Company's Annual Report on Form 10-K with the SEC on March 29, 2019.
  - (7) Filed as an Exhibit to the Company's Registration Statement on Form S-1 (File No. 333-230952) with the SEC on April 19, 2019.
  - (8) Filed as an Exhibit to the Company's Quarterly Report on Form 10-Q with the SEC on November 14, 2019.
  - (9) Filed as an Exhibit to the Company's Current Report on Form 8-K with the SEC on March 3, 2020.
  - (10) Filed as an Exhibit to the Company's Annual Report on Form 10-K with the SEC on March 25, 2020.
  - (11) Filed as an Exhibit to the Company's Current Report on Form 8-K with the SEC on March 26, 2020.
  - (12) Filed as an Exhibit to the Company's Current Report on Form 8-K with the SEC on April 8, 2020.
- (b) Financial statement schedules.

No financial statement schedules are provided because the information called for is not required or is shown in the consolidated financial statements or related notes.

## Item 17. Undertakings

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended (the "Securities Act") may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20.0% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided, however, that Paragraphs (a)(1)(i), (ii) and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are incorporated by reference in the registration statement.

- (2) That for the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability of the Registrant under the Securities Act to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
  - (i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;
  - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;
  - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and
  - (iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.
- (5)
  - (i) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
  - (ii) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(6) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, we have duly caused this Amendment No. 2 to Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Jose, State of California, on the 20th day of April, 2020.

### SUMMIT WIRELESS TECHNOLOGIES, INC.

By: /s/ Brett Moyer  
Brett Moyer  
President and Chief Executive Officer

### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose individual signature appears below hereby authorizes and appoints Brett Moyer and George Oliva, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his true and lawful attorney-in-fact and agent to act in his or her name, place and stead, and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this registration statement, filed after the date hereof, any related registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, filed after the date hereof, and any or all pre- or post-effective amendments thereto, filed after the date hereof, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the U.S. Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorneys-in-fact and agents, and each of them, or any substitute or substitutes for each of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Brett Moyer</u> Brett Moyer	President, Chief Executive Officer and Chairman of the Board ( <i>principal executive officer</i> )	April 20, 2020
<u>/s/ George Oliva</u> George Oliva	Chief Financial Officer ( <i>principal financial officer</i> )	April 20, 2020
<u>/s/ Gary Williams</u> Gary Williams	Chief Accounting Officer ( <i>principal accounting officer</i> )	April 20, 2020
<u>/s/ Jonathan Gazdak</u> Jonathan Gazdak	Director	April 20, 2020
<u>/s/ Dr. Jeffrey M. Gilbert</u> Dr. Jeffrey M. Gilbert	Director	April 20, 2020
<u>/s/ Helge Kristensen</u> Helge Kristensen	Director	April 20, 2020
<u>/s/ Sam Runco</u> Sam Runco	Director	April 20, 2020
<u>/s/ Robert Tobias</u> Robert Tobias	Director	April 20, 2020
<u>/s/ Michael Howse</u> Michael Howse	Director	April 20, 2020
<u>/s/ Lisa Cummins</u> Lisa Cummins	Director	April 20, 2020

\_\_\_\_\_ SHARES OF COMMON STOCK  
 \_\_\_\_\_ PRE-FUNDED WARRANTS (EXERCISABLE FOR \_\_\_\_\_ SHARES)  
 AND  
 \_\_\_\_\_ WARRANTS (EXERCISABLE FOR \_\_\_\_\_ SHARES)  
 OF  
 SUMMIT WIRELESS TECHNOLOGIES, INC.  
 UNDERWRITING AGREEMENT

[ ], 2020

Maxim Group LLC  
 Investment Banking  
 405 Lexington Avenue, 2nd Fl.  
 New York, New York 10174

*As Representative of the  
 Several underwriters, if any, named in Schedule I hereto*

Ladies and Gentlemen:

The undersigned, SUMMIT WIRELESS TECHNOLOGIES, INC., a company incorporated under the laws of Delaware (collectively with its subsidiaries and affiliates, including, without limitation, all entities disclosed or described in the Registration Statement as being subsidiaries or affiliates of SUMMIT WIRELESS TECHNOLOGIES, INC., the "Company"), hereby confirms its agreement (this "Agreement") with the several underwriters (such underwriters, including the Representative (as defined below), the "Underwriters" and each an "Underwriter") named in Schedule I hereto for which MAXIM GROUP LLC is acting as representative to the several Underwriters (in such capacity, the "Representative" and if there are no Underwriters other than the Representative, references to multiple Underwriters shall be disregarded and the term Representative as used herein shall have the same meaning as Underwriters) on the terms and conditions set forth herein.

It is understood that the several Underwriters are to make a public offering of the Public Securities as soon as the Representative deems it advisable to do so. The Public Securities are to be initially offered to the public at the public offering price set forth in the Prospectus. The Representative may from time to time after the Offering (as defined below) change the public offering price and other selling terms.

It is further understood that you will act as the Representative for the Underwriters in the offering and sale of the Closing Securities and, if any, the Option Securities in accordance with this Agreement.

**ARTICLE I.  
DEFINITIONS**

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

"Action" shall have the meaning ascribed to such term in Section 3.1(k).

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“Affiliate” means with respect to any Person, any other Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with such Person as such terms are used in and construed under Rule 405 under the Securities Act.

“Board of Directors” means the board of directors of the Company.

“Business Day” means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

“Closing” means the closing of the purchase and sale of the Closing Securities pursuant to Section 2.1.

“Closing Date” means the hour and the date on the Trading Day on which all conditions precedent to (i) the Underwriters’ obligations to pay the Closing Purchase Price and (ii) the Company’s obligations to deliver the Closing Securities, in each case, have been satisfied or waived, but in no event later than 10:00 a.m. (New York City time) on the second (2nd ) Trading Day following the date hereof or at such earlier time as shall be agreed upon by the Representative and the Company.

“Closing Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b), which aggregate purchase price shall be net of underwriting discounts and commissions.

“Closing Securities” shall have the meaning ascribed to such term in Section 2.1(a)(iii).

“Closing Shares” shall have the meaning ascribed to such term in Section 2.1(a)(i).

“Closing Warrants” shall have the meaning ascribed to such term in Section 2.1(a)(iii).

“Commission” means the United States Securities and Exchange Commission.

“Common Stock” means the common stock of the Company, par value \$0.0001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Auditor” means BPM LLP, with offices located at 10 Almaden Blvd #1000, San Jose, California 95113.

“Company Counsel” means Sullivan & Worcester LLP, 1633 Broadway, New York, New York 10019.

“Effective Date” means the date and time as of which the Registration Statement became effective, or is deemed to have become effective by the Commission, in accordance with the rules and regulations under the Securities Act.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Execution Date” shall mean the date on which the parties execute and enter into this Agreement.

“Exempt Issuance” means the issuance of (a) shares of Common Stock, restricted stock, restricted stock units or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose, by a majority of the non-employee members of the Board of Directors or a majority of the members of a committee of non-employee directors established for such purpose for services rendered to the Company, (b) securities upon the exercise or exchange of or conversion of any Securities issued hereunder and/or other securities exercisable or exchangeable for or convertible into shares of Common Stock issued and outstanding on the date of this Agreement, provided that such securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities (other than in connection with automatic price resets, stock splits, adjustments or combinations as set forth in such securities) or to extend the term of such securities and (c) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as “restricted securities”(as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith during the prohibition period in Section 4.21(a) herein, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business which shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

“FCPA” means the Foreign Corrupt Practices Act of 1977, as amended.

“FINRA” means the Financial Industry Regulatory Authority.

“GAAP” shall have the meaning ascribed to such term in Section 3.1(i).

“General Disclosure Package” shall have the meaning ascribed to such term in Section 3.1(f).

“G&M” means Gracin & Marlow, LLP, with offices at 405 Lexington Avenue, 26th Floor, New York, New York 10174, counsel to the Underwriters.

“Indebtedness” means (a) any liabilities for borrowed money or amounts owed in excess of \$100,000 (other than trade accounts payable incurred in the ordinary course of business), (b) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company’s consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (c) the present value of any lease payments in excess of \$100,000 due under leases required to be capitalized in accordance with GAAP.

“Intellectual Property Rights” shall have the meaning ascribed to such term in Section 3.1(q).

“IP Company Counsel” means Chernoff Vilhauer LLP and Greenberg Traurig, LLP.

“Liens” means a lien, charge, pledge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Lock-Up Agreements” means the lock-up agreements that are delivered on the date hereof by each of the Company’s officers and directors and the other stockholders set forth on Schedule 2 hereto, in the form of Exhibit A attached hereto.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(b).

“Offering” shall have the meaning ascribed to such term in Section 2.1(c).

“Option Closing Date” shall have the meaning ascribed to such term in Section 2.2(c).

“Option Closing Purchase Price” shall have the meaning ascribed to such term in Section 2.2(b), which aggregate purchase price shall be net of the underwriting discounts and commissions.

“Option Securities” shall have the meaning ascribed to such term in Section 2.2(a).

“Option Shares” shall have the meaning ascribed to such term in Section 2.2(a)(i).

“Option Warrants” shall have the meaning ascribed to such term in Section 2.2(a).

“Over-Allotment Option” shall have the meaning ascribed to such term in Section 2.2(a).

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Pre-Funded Warrant Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Pre-Funded Warrants” means the Pre-Funded Warrants delivered to the Underwriters in accordance with Section 2.1(a)(ii), which Pre-Funded Warrants shall be exercisable immediately and shall be in the form of Exhibit E attached hereto.

“Pre-Funded Warrant Shares” means the shares of Common Stock issuable upon exercise of the Pre-Funded Warrants.

“Preliminary Prospectus” shall have the meaning ascribed to such term in Section 3.1(f).

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Prospectus” shall have the meaning ascribed to such term in Section 3.1(f).

“Public Securities” means, collectively, the Closing Securities and, if any, the Option Securities.

“Registration Statement” shall have the meaning ascribed to such term in Section 3.1(f).

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(e).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(i).

“Securities” means the Closing Securities, the Option Securities, the Warrant Shares and the Underwriter’s Securities.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Share Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Shares” means, collectively, the shares of Common Stock delivered to the Underwriters in accordance with Section 2.1(a)(i) and Section 2.2(a).

“Subsidiary” means any subsidiary of the Company and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the principal Trading Market is open for trading.

“Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Traditional Warrants” means, collectively, the Common Stock purchase warrants delivered to the Underwriters in accordance with Section 2.1(a)(ii) and Section 2.2, which Traditional Warrants shall be exercisable immediately and have a term of exercise equal to five (5) years, in the form of Exhibit B attached hereto.

“Transaction Documents” means this Agreement and all exhibits and schedules hereto, the Traditional Warrants, the Warrant Agreement, the Pre-Funded Warrants, the Lock-Up Agreements, the Underwriter’s Warrant Agreement and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means VStock Transfer, LLC, the current transfer agent of the Company with a mailing address of 8 Lafayette Place, Woodmere, New York 11598, a phone number of (212) 828-8436 and an email address of shay@vstock.com, and any successor transfer agent of the Company.

“Underwriter’s Securities” shall have the meaning ascribed to such term in Section 2.3.

“Underwriter’s Warrants” shall have the meaning ascribed to such term in Section 2.3.

“Underwriter’s Warrant Agreement” shall have the meaning ascribed to such term in Section 2.3.

“Variable Rate Transaction” shall have the meaning ascribed to such term in Section 4.21(b).

“Warrant Purchase Price” shall have the meaning ascribed to such term in Section 2.1(b).

“Warrant Shares” means the shares of Common Stock issuable upon exercise of the Warrants.

“Warrants” means, collectively, the Traditional Warrants, the Pre-Funded Warrants and the Underwriter’s Warrants.

**ARTICLE II.  
PURCHASE AND SALE**

**2.1 Closing.**

(a) Upon the terms and subject to the conditions set forth herein, the Company agrees to sell in the aggregate (i) [ ] shares of Common Stock, (ii) Traditional Warrants exercisable for an aggregate of [ ] shares of Common Stock, and (iii) pre-funded warrants in the form attached hereto as Exhibit E (the "Pre-Funded Warrants") exercisable for an aggregate of [ ] shares of Common Stock, and each Underwriter agrees to purchase, severally and not jointly, at the Closing, the following securities of the Company:

(i) the number of shares of Common Stock (the "Closing Shares") set forth opposite the name of such Underwriter on Schedule I hereof;

(ii) Traditional Warrants to purchase up to the number of shares of Common Stock set forth opposite the name of such Underwriter on Schedule I hereof (the "Traditional Warrant Shares"), which shall have an exercise price of \$[ ] (subject to adjustment as provided therein); and

(iii) Pre-Funded Warrants to purchase up to the number of shares of Common Stock set forth opposite the name of such Underwriter on Schedule I hereof, which shall have an exercise price equal to \$0.01 (the "Pre-Funded Warrant Shares") (subject to adjustment therein) (collectively, with the Traditional Warrants delivered at Closing, the "Closing Warrants" and, collectively with the Closing Shares and the Traditional Warrants, the "Closing Securities").

(b) The aggregate purchase price for the Closing Securities shall equal the amount set forth opposite the name of such Underwriter on Schedule I hereto (the "Closing Purchase Price"). The purchase price shall be \$[ ] per Closing Share (92% of the per Closing Share public offering price) (the "Share Purchase Price"), \$0.0092 per Traditional Warrant (92% of the per Traditional Warrant public offering price) (the "Warrant Purchase Price") and \$[ ] per Pre-Funded Warrant (92% of the per Pre-Funded Warrant public offering price) (the "Pre-Funded Warrant Purchase Price"). Notwithstanding the foregoing, the Share Purchase Price and/or the Pre-Funded Warrant Purchase Price for any Closing Securities purchased by Lisa Walsh or any of her Affiliates shall be \$[ ] per Closing Share (96% of the per Closing Share public offering price) and \$[ ] per Pre-Funded Warrant (96% of the per Pre-Funded Warrant public offering price) and the Warrant Purchase Price for any Traditional Warrant shall be \$0.0096 per Traditional Warrant (96% of the per Traditional Warrant public offering price).

(c) On the Closing Date, each Underwriter shall deliver or cause to be delivered to the Company, via wire transfer, immediately available funds equal to such Underwriter's Closing Purchase Price and the Company shall deliver to, or as directed by, such Underwriter its respective Closing Securities and the Company shall deliver the other items required pursuant to Section 2.4 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.4 and 2.5, the Closing shall occur at the offices of G&M or such other location as the Company and Representative shall mutually agree. The Public Securities are to be offered initially to the public at the offering price set forth on the cover page of the Prospectus (the "Offering").

(d) The Company acknowledges and agrees that, with respect to any Notice(s) of Exercise (as defined in the Pre-Funded Warrants and the Traditional Warrant) delivered by a Holder (as defined in the Pre-Funded Warrants and the Traditional Warrants) on or prior to 12:00 p.m. (New York City time) on the Closing Date, which Notice(s) of Exercise may be delivered at any time after the time of execution of this Agreement, the Company shall deliver the Warrant Shares (as defined in the Traditional Warrants) and the Pre-Funded Warrant Shares (as defined in the Pre-Funded Warrants) subject to such notice(s) to the Holder by 4:00 p.m. (New York City time) on the Closing Date. The Company acknowledges and agrees that the Holders are third-party beneficiaries of this covenant of the Company.

**2.2 Over-Allotment Option.**

(a) For the purposes of covering any over-allotments in connection with the distribution and sale of the Closing Securities, the Representative is hereby granted an option (the "Over-Allotment Option") to purchase, in the aggregate, up to [ ] shares of Common Stock representing 15% of the Closing Shares and the Pre-Funded Warrant Shares (the "Option Shares") and/or Traditional Warrants to purchase up to [ ] shares of Common Stock representing 15% of the Traditional Warrant Shares (the "Option Warrants" and, collectively with the Option Shares, the "Option Securities"), which may be purchased in any combination of Option Shares and/or Option Warrants at the Share Purchase Price and/or Warrant Purchase Price, respectively.

(b) In connection with an exercise of the Over-Allotment Option, (a) the purchase price to be paid for any Option Shares is equal to the product of the Share Purchase Price multiplied by the number of Option Shares to be purchased and (b) the purchase price to be paid for any Option Warrants is equal to the product of the Warrant Purchase Price multiplied by the number of Option Warrants to be purchased (the aggregate purchase price to be paid on an Option Closing Date, the “Option Closing Purchase Price”).

(c) The Over-Allotment Option granted pursuant to this Section 2.2 may be exercised by the Representative as to all (at any time) or any part (from time to time) of the Option Securities within 45 days after the Execution Date. An Underwriter will not be under any obligation to purchase any Option Securities prior to the exercise of the Over-Allotment Option by the Representative. The Over-Allotment Option granted hereby may be exercised by the giving of oral notice to the Company from the Representative, which must be confirmed in writing by overnight mail or facsimile or other electronic transmission setting forth the number of Option Shares and/or Option Warrants to be purchased and the date and time for delivery of and payment for the Option Securities (each, an “Option Closing Date”), which will not be later than the earlier of (i) 45 days after the Execution Date and (ii) two (2) full Business Days after the date of the notice or such other time as shall be agreed upon by the Company and the Representative, at the offices of G&M or at such other place (including remotely by facsimile or other electronic transmission) as shall be agreed upon by the Company and the Representative. If such delivery and payment for the Option Securities does not occur on the Closing Date, each Option Closing Date will be as set forth in the notice. Upon exercise of the Over-Allotment Option, the Company will become obligated to convey to the Underwriters, and, subject to the terms and conditions set forth herein, the Underwriters will become obligated to purchase, the number of Option Shares and/or Option Warrants specified in such notice. The Representative may cancel the Over-Allotment Option at any time prior to the expiration of the Over-Allotment Option by written notice to the Company.

(d) The Traditional Warrants and the Option Warrants, if any, shall be issued pursuant to, and shall have the rights and privileges set forth in, a warrant agreement, dated on or before the Closing Date, between the Company and VStock Transfer, LLC, as warrant agent, in the form attached hereto as Exhibit C (the “Warrant Agreement”).

### 2.3 Underwriter’s Securities.

(a) Underwriter’s Warrants. The Company hereby agrees to issue and sell to the Representative (and/or its designees) on the Closing Date for an aggregate purchase price of \$100.00 one or more warrants (the “Underwriter’s Warrants”) for the purchase of an aggregate of [●] shares of Common Stock (which is equal to an aggregate of 5% of the shares of Common Stock and the Pre-Funded Warrant Shares included as Closing Securities sold in the Offering). The Underwriter’s Warrants shall be issuable pursuant to the Underwriter’s Warrant Agreement in the form attached hereto as Exhibit D (the “Underwriter’s Warrant Agreement”) and exercisable, in whole or in part, commencing on a date which is six months after the Effective Date and expiring on the five-year anniversary of the Effective Date at an initial exercise price per share of Common Stock of \$[●], which is equal to 120% of the public offering price of each Closing Share. The Underwriter’s Warrant Agreement and the shares of Common Stock issuable upon exercise thereof are sometimes hereinafter referred to together as the “Underwriter’s Securities.” The Representative understands and agrees that there are significant restrictions pursuant to FINRA Rule 5110 against transferring the Underwriter’s Warrant and the underlying shares of Common Stock during the one hundred eighty (180) days after the Effective Date and by its acceptance thereof agrees that it will not sell, transfer, assign, pledge or hypothecate the Underwriter’s Warrant Agreement, or any portion thereof, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of such securities for a period of one hundred eighty (180) days following the Effective Date to anyone other than (i) an Underwriter or a selected dealer in connection with the Offering, or (ii) a bona fide officer or partner of the Representative or of any such Underwriter or selected dealer; and only if any such transferee agrees to the foregoing lock-up restrictions.

(b) Delivery. Delivery of the Underwriter's Warrant Agreement shall be made on the Closing Date and shall be issued in the name or names and in such authorized denominations as the Representative may request.

2.4 Deliveries. The Company shall deliver or cause to be delivered to each Underwriter (if applicable) the following:

(a) At the Closing Date, the Closing Shares and, as to each Option Closing Date, if any, the applicable Option Shares, which shares shall be delivered via The Depository Trust Company Deposit or Withdrawal at Custodian system for the accounts of the several Underwriters;

(b) At the Closing Date, the Closing Warrants and, as to each Option Closing Date, if any, the applicable Option Warrants in the form requested in writing by the applicable Underwriter at least one Business Day prior to the Closing Date and, if any, each Option Closing Date, which form may be: (i) certificated form registered in the name or names and in such authorized denominations as request by the applicable Underwriter, or (ii) delivered via The Depository Trust Company Deposit or Withdrawal at Custodian system for the accounts of the several Underwriters;

(c) At the Closing Date, the Underwriter's Warrants issuable pursuant to Section 2.3;

(d) At the Closing Date, legal opinions of Company Counsel addressed to the Underwriters, including, without limitation, a negative assurance letter, in form and substance reasonably satisfactory to the Representative and as to the Closing Date and as to each Option Closing Date, if any, bring-down opinions from Company Counsel in form and substance reasonably satisfactory to the Representative, including, without limitation, a negative assurance letter, addressed to the Underwriters and in form and substance satisfactory to the Representative;

(e) At the Closing Date and at each Option Closing Date, the duly executed and delivered opinion (addressed to the Underwriters) of Company Counsel, IP Counsel for the Company with respect to certain intellectual property matters dated as of the Closing Date and each Option Closing Date, if any, and in form and substance satisfactory to the Representative

(f) Contemporaneously herewith, a cold comfort letter, addressed to the Underwriters and in form and substance satisfactory in all respects to the Representative from the Company Auditor dated as of the date of this Agreement and a bring-down letter dated as of the Closing Date and each Option Closing Date, if any;

(g) On the Closing Date and on each Option Closing Date, the duly executed and delivered Officer's Certificate, in form and substance satisfactory to the Representative;

(h) On the Closing Date and on each Option Closing Date, the duly executed and delivered Chief Financial Officer's Certificate, in form and substance satisfactory to the Representative;

(i) On the Closing Date and on each Option Closing Date, the duly executed and delivered Secretary's Certificate, in form and substance satisfactory to the Representative;

(j) Contemporaneously herewith, the duly executed and delivered Lock-Up Agreements; and

(k) Such other certificates, opinions or documents as the Underwriters and G&M may reasonably request.

2.5 Closing Conditions. The respective obligations of each Underwriter hereunder in connection with the Closing and each Option Closing Date are subject to the following conditions being met:

(a) the accuracy in all material respects when made and on the date in question of the representations and warranties of the Company contained herein (unless as of a specific date therein, in which case they shall be true and correct only as of such date) (other than representations and warranties of the Company already qualified by materiality, which shall be true and correct in all respects);

(b) all obligations, covenants and agreements of the Company required to be performed at or prior to the date in question shall have been performed;

(c) the delivery by the Company of the items set forth in Section 2.4 of this Agreement;

(d) the Registration Statement shall be effective on the date of this Agreement and at each of the Closing Date and each Option Closing Date, if any, no stop order suspending the effectiveness of the Registration Statement shall have been issued and no proceedings for that purpose shall have been instituted or shall be pending or contemplated by the Commission and any request on the part of the Commission for additional information shall have been complied with to the reasonable satisfaction of the Representative;

(e) by the Execution Date, if required by FINRA, the Underwriters shall have received a notice of no objections from FINRA as to the amount of compensation allowable or payable to and the terms and arrangements for acting as the Underwriters as described in the Registration Statement;

(f) the Closing Shares, the Option Shares, the Warrant Shares, the Pre-Funded Warrant Shares and the shares of Common Stock issuable upon exercise of the Underwriter's Warrants have been approved for listing on the Trading Market; and

(g) prior to and on each of the Closing Date and each Option Closing Date, if any: (i) there shall have been no material adverse change or development involving a prospective material adverse change in the condition or prospects or the business activities, financial or otherwise, of the Company from the latest dates as of which such condition is set forth in the Registration Statement, the General Disclosure Package (as defined in Section 3.1(f) below) and the Prospectus; (ii) no action suit or proceeding, at law or in equity, shall have been pending or threatened against the Company or any Affiliate of the Company before or by any court or federal or state commission, board or other administrative agency wherein an unfavorable decision, ruling or finding may materially adversely affect the business, operations, prospects or financial condition or income of the Company, except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus; (iii) no stop order applicable to the Company shall have been issued under the Securities Act and no proceedings therefor shall have been initiated or threatened by the Commission; (iv) the Company has not incurred any material liabilities or obligations, direct or contingent, nor has it entered into any material transactions not in the ordinary course of business, other than pursuant to this Agreement and the transactions referred to herein; (v) the Company has not paid or declared any dividends or other distributions of any kind on any class of its capital stock; (vi) the Company has not altered its method of accounting; and (vii) the Registration Statement, the General Disclosure Package and the Prospectus and any amendments or supplements thereto shall contain all material statements which are required to be stated therein in accordance with the Securities Act and the rules and regulations thereunder and shall conform in all material respects to the requirements of the Securities Act and the rules and regulations thereunder, and neither the Registration Statement, the General Disclosure Package nor the Prospectus nor any amendment or supplement thereto shall contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

If any of the conditions specified in this Section 2.5 shall not have been fulfilled when and as required by this Agreement, or if any of the certificates, opinions, written statements or letters furnished to the Representative or to Representative's counsel pursuant to this Section 2.5 shall not be reasonably satisfactory in form and substance to the Representative and to Representative's counsel, all obligations of the Underwriters hereunder may be cancelled by the Representative at, or at any time prior to, the consummation of the Closing. Notice of such cancellation shall be given to the Company in writing or orally. Any such oral notice shall be confirmed promptly thereafter in writing.

### **ARTICLE III. REPRESENTATIONS AND WARRANTIES**

3.1 Representations and Warranties of the Company. The Company represents and warrants to the Underwriters as of the Execution Date, as of the Closing Date and as of each Option Closing Date, if any, as follows:

(a) Subsidiaries. All of the direct and indirect Subsidiaries of the Company are described in the Registration Statement, the General Disclosure Package and the Prospectus to the extent necessary. The Company owns, directly or indirectly, all of its capital stock or other equity interests of each Subsidiary free and clear of any Liens, charges, security interests, encumbrances, rights of first refusal, preemptive rights or other restrictions, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities.

(b) Organization and Qualification. The Company and each of the Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any Subsidiary is in violation nor default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and the Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in: (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company and the Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect") and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(c) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents to which it is a party and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which the Company is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(d) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents to which it is a party, the issuance and sale of the Securities and the Underwriter's Securities and the consummation by it of the transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's or any Subsidiary's certificate or articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company or any Subsidiary, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company or Subsidiary debt or otherwise) or other understanding to which the Company or any Subsidiary is a party or by which any property or asset of the Company or any Subsidiary is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company or a Subsidiary is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company or a Subsidiary is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(e) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than: (i) the filing with the Commission of the Prospectus, (ii) such filings as are required to be made under applicable state securities laws and (iii) application(s) to each applicable Trading Market for the listing of the Shares, the Warrant Shares, the Pre-Funded Warrant Shares and the shares of Common Stock issuable upon exercise of the Underwriter's Warrant for trading thereon in the time and manner required thereby (collectively, the "Required Approvals").

(f) Registration Statement. The Company has filed with the Commission the Registration Statement, including any related Preliminary Prospectus or Prospectuses, for the registration of the Securities under the Securities Act, which Registration Statement has been prepared by the Company in conformity with the requirements of the Securities Act and the rules and regulations of the Commission under the Securities Act. The registration of the Common Stock under the Exchange Act has been declared effective by the Commission on or prior to and is effective on the date hereof. Copies of such Registration Statement and of each amendment thereto, if any, including the related Preliminary Prospectuses, heretofore filed by the Company with the Commission have been delivered to the Underwriters. The term “Registration Statement” means such registration statement on Form S-1 (File No. 333-237516), as amended, as of the relevant Effective Date, including financial statements, all exhibits and any information deemed to be included or incorporated by reference therein, including any information deemed to be included pursuant to Rule 430A or Rule 430B of the Securities Act and the rules and regulations thereunder, as applicable. If the Company files a registration statement to register a portion of the Securities and relies on Rule 462(b) of the Securities Act and the rules and regulations thereunder for such registration statement to become effective upon filing with the Commission (the “Rule 462 Registration Statement”), then any reference to the “Registration Statement” shall be deemed to include the Rule 462 Registration Statement, as amended from time to time. The term “Preliminary Prospectus” as used herein means a preliminary prospectus as contemplated by Rule 430 or Rule 430A of the Securities Act and the rules and regulations thereunder as included at any time as part of, or deemed to be part of or included in, the Registration Statement. The term “Prospectus” means the final prospectus in connection with this Offering as first filed with the Commission pursuant to Rule 424(b) of the Securities Act and the rules and regulations thereunder or, if no such filing is required, the form of final prospectus included in the Registration Statement at the Effective Date, except that if any revised prospectus or prospectus supplement shall be provided to the Representative by the Company for use in connection with the Securities which differs from the Prospectus (whether or not such revised prospectus or prospectus supplement is required to be filed by the Company pursuant to Rule 424(b)), the term “Prospectus” shall also refer to such revised prospectus or prospectus supplement, as the case may be, from and after the time it is first provided to the Representative for such use. Any reference herein to the terms “amend”, “amendment” or “supplement” with respect to the Registration Statement, any Preliminary Prospectus or the Prospectus shall be deemed to refer to and include: (i) the filing of any document under the Exchange Act after the Effective Date, the date of such Preliminary Prospectus or the date of the Prospectus, as the case may be, which is incorporated therein by reference, and (ii) any such document so filed. All references in this Agreement to the Registration Statement, a Preliminary Prospectus and the Prospectus, or any amendments or supplements to any of the foregoing shall be deemed to include any copy thereof filed with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval System (“EDGAR”). The term “General Disclosure Package” means, collectively, the Permitted Free Writing Prospectus(es) (as defined below) issued at or prior to the date hereof, the most recent preliminary prospectus related to this offering, and the information included on Schedule I hereto.

(g) Issuance of Securities. The Public Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Warrant Shares are duly authorized and, when issued in accordance with the terms of the Warrants, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Pre-Funded Warrant Shares are duly authorized and, when issued in accordance with the terms of the Pre-Funded Warrants, will be validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Underwriter’s Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement, the Warrants and the Underwriter’s Warrants. Neither the Securities nor the Underwriter’s Securities are or will be subject to the preemptive rights of any holders of any security of the Company or similar contractual rights granted by the Company. All corporate action required to be taken for the authorization, issuance and sale of the Securities has been duly and validly taken. The Securities conform in all material respects to all statements with respect thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus.

(h) Capitalization. The capitalization of the Company as of the date hereof is as set forth in the Registration Statement, the General Disclosure Package and the Prospectus. Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options under the Company's stock option plans, the issuance of shares of Common Stock to employees pursuant to the Company's employee stock purchase plans and pursuant to the conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents, except such rights which have been waived prior to the date hereof. Except (i) as a result of the purchase and sale of the Securities, (ii) pursuant to the exercise of employee stock options and under the Company's employee stock purchase plans, the issuance of shares of Common Stock to employees under the Company's employee stock purchase plans and pursuant to conversion and/or exercise of Common Stock Equivalents outstanding as of the date of the Company's most recently filed SEC Report, or (iii) as otherwise set forth in the Registration Statement, the General Disclosure Package and the Prospectus, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire, any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or the capital stock of any Subsidiary. The issuance and sale of the Securities will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Underwriters). Except for the redemption rights provided to the holders of the Company's Series A 8% Senior Convertible Preferred Stock, par value \$.0001 per share, in the Company's Certificate of Designations of the Preferences, Rights and Limitations of the Series A 8% Senior Convertible Preferred Stock, there are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. The Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. The authorized shares of the Company conform in all material respects to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus. The offers and sales of the Company's securities were at all relevant times either registered under the Securities Act and the applicable state securities or Blue Sky laws or, based in part on the representations and warranties of the purchasers, exempt from such registration requirements. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders. All requisite approvals, including approvals of the Trading Market, for the transactions effected pursuant to the Warrant Amendment and Exercise Agreements, effected between October 2, 2019 and October 8, 2019, including the warrant repricing, exercise of warrants and other warrant amendments, were obtained.

(i) SEC Reports: Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, together with the Prospectus, being collectively referred to herein as the “SEC Reports”) on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The Company is not and has never been an issuer subject to Rule 144(i) under the Securities Act. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved (“GAAP”), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. The selected financial data set forth under the caption “Selected Financial Data” in the SEC Reports fairly present, on the basis stated in such SEC Reports, the information included therein. The agreements and documents described in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, the Prospectus, and the SEC Reports conform in all material aspects to the descriptions thereof contained therein and there are no agreements or other documents required by the Securities Act and the rules and regulations thereunder to be described in the Registration Statement, the Preliminary Prospectus, the General Disclosure Package, the Prospectus or the SEC Reports or to be filed with the Commission as exhibits to the Registration Statement, that have not been so described or filed. Each agreement or other instrument (however characterized or described) to which the Company is a party or by which it is or may be bound or affected and (i) that is referred to in the Registration Statement, the General Disclosure Package, the Prospectus or the SEC Reports, or (ii) is material to the Company’s business, has been duly authorized and validly executed by the Company, is in full force and effect in all material respects and is enforceable against the Company and, to the Company’s knowledge, the other parties thereto, in accordance with its terms, except (x) as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting creditors’ rights generally, (y) as enforceability of any indemnification or contribution provision may be limited under the federal and state securities laws, and (z) that the remedy of specific performance and injunctive and other forms of equitable relief may be subject to the equitable defenses and to the discretion of the court before which any proceeding therefore may be brought. None of such agreements or instruments has been assigned by the Company, and neither the Company nor, to the best of the Company’s knowledge, any other party is in default thereunder and, to the best of the Company’s knowledge, no event has occurred that, with the lapse of time or the giving of notice, or both, would constitute a default thereunder. To the best of the Company’s knowledge, performance by the Company of the material provisions of such agreements or instruments will not result in a violation of any existing applicable law, rule, regulation, judgment, order or decree of any governmental agency or court, domestic or foreign, having jurisdiction over the Company or any of its assets or businesses, including, without limitation, those relating to environmental laws and regulations.

(j) Material Changes: Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in a subsequent SEC Report filed prior to the date hereof, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company’s financial statements pursuant to GAAP or disclosed in filings made with the Commission, (iii) the Company has not altered its method of accounting in any material respect, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to existing Company stock option plans and employee stock purchase plans, the issuance of Common Stock Equivalents as disclosed in the SEC Reports. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement, no event, liability, fact, circumstance, occurrence or development has occurred or exists with respect to the Company or its Subsidiaries or their respective businesses, prospects, properties, operations, assets or financial condition that would be required to be disclosed by the Company under applicable securities laws at the time this representation is made or deemed made that has not been publicly disclosed at least 1 Trading Day prior to the date that this representation is made. Unless otherwise disclosed in an SEC Report filed prior to the date hereof, the Company has not: (i) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money; or (ii) declared or paid any dividend or made any other distribution on or in respect to its capital stock.

(k) Litigation. There are no actions, suits, inquiries, notices of violation, proceedings or investigations pending or, to the knowledge of the Company, threatened against or affecting the Company, any Subsidiary or any of their respective properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an “Action”) which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company nor any Subsidiary, nor, to the Company’s knowledge, any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. To the knowledge of the Company, there has not been, and there is not pending or threatened, any investigation by the Commission involving the Company or any current or former director or officer of the Company. There are no Actions required to be disclosed in the SEC Reports that have not been disclosed. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company or any Subsidiary under the Exchange Act or the Securities Act.

(l) Labor Relations. No labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company, which could reasonably be expected to result in a Material Adverse Effect. None of the Company’s or its Subsidiaries’ employees is a member of a union that relates to such employee’s relationship with the Company or such Subsidiary, and neither the Company nor any of its Subsidiaries is a party to a collective bargaining agreement and the Company and its Subsidiaries believe that their relationship with their employees are good. To the knowledge of the Company, no executive officer of the Company or any Subsidiary, is in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant in favor of any third party, and the continued employment of each such executive officer does not subject the Company or any of its Subsidiaries to any liability with respect to any of the foregoing matters that would reasonably be expected to have a Material Adverse Effect. The Company and its Subsidiaries are in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours, except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(m) Compliance. Neither the Company nor any Subsidiary: (i) is in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company or any Subsidiary under), nor has the Company or any Subsidiary received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is in violation of any judgment, decree or order of any court, arbitrator or other governmental authority or (iii) is or has been in violation of any statute, rule, ordinance or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws relating to taxes, environmental protection, occupational health and safety, disclosure, product quality and safety and employment and labor matters, except in each case as could not have or reasonably be expected to result in a Material Adverse Effect.

(n) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder ("Environmental Laws"); (ii) have received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(o) Regulatory Permits. The Company and the Subsidiaries possess all licenses, certificates, authorizations, approvals, clearances, consents, registrations, and permits issued by the appropriate federal, state, local or foreign regulatory authorities applicable to the Company ("Applicable Laws") necessary to conduct their respective businesses as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect (each, an "Authorization"), and neither the Company nor any Subsidiary has received any notice of proceedings relating to the revocation or modification of any Authorization or the noncompliance with any ordinance, law, rule or regulation applicable to the Company. The disclosures in the Registration Statement concerning the effects of federal, state, local and all foreign regulation on the Company's business as currently contemplated are correct in all material respects. The Company is and has been in material compliance with any term of any such Authorizations, except for any violations which would not reasonably be expected to have a Material Adverse Effect. The Company has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any governmental authority or body or third party alleging that any product, operation or activity is in violation of any Applicable Laws or Authorizations or has any knowledge that any such entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding, nor, to the Company's knowledge, has there been any material noncompliance with or violation of any Applicable Laws by the Company that could reasonably be expected to require the issuance of any such communication or result in an investigation, corrective action, or enforcement action by any governmental body or entity.

(p) Title to Assets. The Company and the Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and the Subsidiaries, in each case free and clear of all Liens, except for (i) Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and the Subsidiaries and (ii) Liens for the payment of federal, state or other taxes, for which appropriate reserves have been made therefor in accordance with GAAP and, the payment of which is neither delinquent nor subject to penalties.

(q) Intellectual Property. The Company and the Subsidiaries have, or have rights to use, all patents, patent applications, trademarks, trademark applications, service marks, trade names, trade secrets, inventions, copyrights, licenses and other intellectual property rights and similar rights necessary or required for use in connection with their respective businesses as described in the SEC Reports and which the failure to so have could have a Material Adverse Effect (collectively, the “Intellectual Property Rights”). None of, and neither the Company nor any Subsidiary has received a notice (written or otherwise) that any of, the Intellectual Property Rights has expired, terminated or been abandoned, or is expected to expire or terminate or be abandoned, within two (2) years from the date of this Agreement, except where such action would not reasonably be expected to have a Material Adverse Effect. Other than as specifically described in the SEC Reports, neither the Company nor any Subsidiary has received, since the date of the latest audited financial statements included within the SEC Reports, a written notice of a claim or otherwise has any knowledge that the Company’s products or planned products as described in the SEC Reports violate or infringe upon the rights of any Person, except as could not have or reasonably be expected to not have a Material Adverse Effect. To the knowledge of the Company, all such Intellectual Property Rights are enforceable and there is no existing infringement by another Person of any of the Intellectual Property Rights. The Company and its Subsidiaries have taken reasonable security measures to protect the secrecy, confidentiality and value of all of their intellectual properties, except where failure to do so could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(r) Insurance. The Company and the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company and the Subsidiaries are engaged, including, but not limited to, directors and officers insurance coverage. Neither the Company nor any Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.

(s) Transactions With Affiliates and Employees. Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, none of the officers or directors of the Company or any Subsidiary and, to the knowledge of the Company, none of the employees of the Company or any Subsidiary is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, providing for the borrowing of money from or lending of money to or otherwise requiring payments to or from, any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee, stockholder, member or partner, in each case in excess of \$120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(t) Sarbanes-Oxley: Internal Accounting Controls. The Company and the Subsidiaries are in material compliance with any and all applicable requirements of the Sarbanes-Oxley Act of 2002 that are effective as of the date hereof, and any and all applicable rules and regulations promulgated by the Commission thereunder that are effective as of the date hereof and as of the Closing Date. The Company and the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management’s general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company and the Subsidiaries have established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and the Subsidiaries and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission’s rules and forms. The Company’s certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company and the Subsidiaries as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the “Evaluation Date”). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company and its Subsidiaries that have materially adversely affected, or is reasonably likely to materially adversely affect, the internal control over financial reporting of the Company and its Subsidiaries.

(u) Certain Fees. Except as set forth in the Registration Statement, the General Disclosure Package and the Prospectus, no brokerage or finder's fees or commissions are or will be payable by the Company, any Subsidiary or Affiliate of the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. There are no other arrangements, agreements or understandings of the Company or, to the Company's knowledge, any of its stockholders that may affect the Underwriters' compensation, as determined by FINRA. Other than payments to the Underwriters for this Offering (including the issuance to the Representative of the Underwriter's Warrants), the Company has not made and has no agreements, arrangements or understanding to make any direct or indirect payments (in cash, securities or otherwise) to: (i) any person, as a finder's fee, consulting fee or otherwise, in consideration of such person raising capital for the Company or introducing to the Company persons who raised or provided capital to the Company; (ii) any FINRA member; or (iii) any person or entity that has any direct or indirect affiliation or association with any FINRA member, within the 180-day period preceding the initial filing of the Registration Statement through the 90-day period after the Effective Date. None of the net proceeds of the Offering will be paid by the Company to any participating FINRA member or its affiliates, except as specifically authorized herein.

(v) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(w) Registration Rights. No Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiary, other than those rights that have been disclosed in the Registration Statement or have been waived or satisfied.

(x) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act nor has the Company received any notification that the Commission is contemplating terminating such registration. Except as set forth in the Registration Statement, the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the listing or maintenance requirements of such Trading Market. The Company is in compliance with all such listing and maintenance requirements. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees of the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(y) Application of Takeover Protections. The Company and the Board of Directors have taken or prior to the Initial Closing will have taken all necessary action within its power, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Company's articles of incorporation (or similar charter documents) or the laws of its state of incorporation that is or would become applicable as a result of the Underwriters and the Company fulfilling their obligations or exercising their rights under the Transaction Documents.

(z) Disclosure: 10b-5. The Registration Statement (and any further documents to be filed with the Commission) contains all exhibits and schedules as required by the Securities Act. Each of the Registration Statement and any post-effective amendment thereto, if any, at the time it became effective, complied in all material respects with the Securities Act and the Exchange Act and the applicable rules and regulations under the Securities Act and did not and, as amended or supplemented, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. The Preliminary Prospectus and the Prospectus, each as of its respective date, comply in all material respects with the Securities Act and the Exchange Act and the applicable rules and regulations. The Prospectus, as amended or supplemented, did not and will not contain as of the date thereof any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, except for any statements in or omissions from the Prospectus based upon and in conformity with written information furnished to the Company by any Underwriter, it being understood that such information furnished by any Underwriter shall consist of the Underwriters' Information. As of its date and the date hereof, the General Disclosure Package did not and does not include any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, except for any statements in or omissions from the General Disclosure Package based upon and in conformity with written information furnished to the Company by any Underwriter, it being understood that such information furnished by any Underwriter shall consist of the Underwriters' Information. The SEC Reports, when they were filed with the Commission, conformed in all material respects to the requirements of the Securities Act and the Exchange Act, as applicable, and the applicable rules and regulations, and none of such documents, when they were filed with the Commission, contained any untrue statement of a material fact or omitted to state a material fact necessary to make the statements therein (with respect to the SEC Reports incorporated by reference in the Prospectus), in light of the circumstances under which they were made not misleading; and any further documents so filed and incorporated by reference in the Prospectus, when such documents are filed with the Commission, will conform in all material respects to the requirements of the Exchange Act and the applicable rules and regulations, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made not misleading. No post-effective amendment to the Registration Statement reflecting any facts or events arising after the date thereof which represent, individually or in the aggregate, a fundamental change in the information set forth therein is required to be filed with the Commission. There are no documents required to be filed with the Commission in connection with the transaction contemplated hereby that (x) have not been filed as required pursuant to the Securities Act or (y) will not be filed within the requisite time period. There are no contracts or other documents required to be described in the Preliminary Prospectus or Prospectus, or to be filed as exhibits or schedules to the Registration Statement, which have not been described or filed as required. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading.

(aa) No Integrated Offering. Neither the Company, nor any of its Affiliates, nor any Person acting on its or their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would cause this offering of the Securities to be integrated with prior offerings by the Company for purposes of any applicable shareholder approval provisions of any Trading Market on which any of the securities of the Company are listed or designated.

(bb) Solvency. Based on the consolidated financial condition of the Company as of the Closing Date, after giving effect to the receipt by the Company of the proceeds from the sale of the Securities hereunder, (i) the fair saleable value of the Company's assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature, (ii) the Company's assets do not constitute unreasonably small capital to carry on its business as now conducted and as proposed to be conducted including its capital needs taking into account the particular capital requirements of the business conducted by the Company, consolidated and projected capital requirements and capital availability thereof, and (iii) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its liabilities when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction within one year from the Closing Date. The SEC Reports sets forth as of the date hereof all outstanding secured and unsecured Indebtedness of the Company or any Subsidiary, or for which the Company or any Subsidiary has commitments. Neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

(cc) Tax Status. Except for matters that would not, individually or in the aggregate, have or reasonably be expected to result in a Material Adverse Effect, the Company and its Subsidiaries each (i) has made or filed all United States federal, state and local income and all foreign income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company or of any Subsidiary know of no basis for any such claim. The provisions for taxes payable, if any, shown on the financial statements filed with or as part of the Registration Statement are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. The term "taxes" mean all federal, state, local, foreign, and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments, or charges of any kind whatsoever, together with any interest and any penalties, additions to tax, or additional amounts with respect thereto. The term "returns" means all returns, declarations, reports, statements, and other documents required to be filed in respect to taxes.

(dd) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of FCPA. The Company has taken reasonable steps to ensure that its accounting controls and procedures are sufficient to cause the Company to comply in all material respects with the FCPA.

(ee) Accountants. To the knowledge and belief of the Company, the Company Auditor (i) is an independent registered public accounting firm as required by the Exchange Act and (ii) shall express its opinion with respect to the financial statements to be included in the Company's Annual Report for the fiscal years ending December 31, 2019 and 2018.

(ff) Equity Incentive Awards. Each equity incentive award granted by the Company under the Company's 2018 Long-Term Incentive Plan or other equity incentive plan of the Company was granted (i) in accordance with the terms of such plan and (ii) any option was granted with an exercise price at least equal to the fair market value of the Common Stock on the date such stock option would be considered granted under GAAP and applicable law. No stock option granted under the Company's stock option plan has been backdated. The Company has not knowingly granted, and there is no and has been no Company policy or practice to knowingly grant, stock options prior to, or otherwise knowingly coordinate the grant of stock options with, the release or other public announcement of material information regarding the Company or its Subsidiaries or their financial results or prospects.

(gg) Office of Foreign Assets Control. Neither the Company nor any Subsidiary nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary is currently subject to any U.S. sanctions administered by the Office of Foreign Assets Control of the U.S. Treasury Department.

(hh) U.S. Real Property Holding Corporation. The Company is not and has never been a U.S. real property holding corporation within the meaning of Section 897 of the Internal Revenue Code of 1986, as amended, and the Company shall so certify upon the Representative's request.

(ii) Bank Holding Company Act. Neither the Company nor any of its Subsidiaries or Affiliates is subject to the Bank Holding Company Act of 1956, as amended (the "BHCA") and to regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve"). Neither the Company nor any of its Subsidiaries or Affiliates owns or controls, directly or indirectly, five percent (5%) or more of the outstanding shares of any class of voting securities or twenty-five percent (25%) or more of the total equity of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve. Neither the Company nor any of its Subsidiaries or Affiliates exercises a controlling influence over the management or policies of a bank or any entity that is subject to the BHCA and to regulation by the Federal Reserve.

(jj) Money Laundering. The operations of the Company and its Subsidiaries are and have been conducted at all times in compliance with applicable financial record-keeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, applicable money laundering statutes and applicable rules and regulations thereunder (collectively, the "Money Laundering Laws"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any Subsidiary with respect to the Money Laundering Laws is pending or, to the knowledge of the Company or any Subsidiary, threatened.

(kk) D&O Questionnaires. To the Company's knowledge, all information contained in the questionnaires most recently completed by each of the Company's directors and officers is true and correct in all respects and the Company has not become aware of any information which would cause the information disclosed in such questionnaires become inaccurate and incorrect.

(ll) FINRA Affiliation. No officer, director or, to the Company's knowledge, any beneficial owner of 5% or more of the Company's shares of Common Stock or Common Stock Equivalents has any direct or indirect affiliation or association with any FINRA member (as determined in accordance with the rules and regulations of FINRA) that is participating in the Offering. Except for securities purchased on the open market, no Company Affiliate is an owner of stock or other securities of any member of FINRA. No Company Affiliate has made a subordinated loan to any member of FINRA. No proceeds from the sale of the Securities (excluding underwriting compensation as disclosed in the Registration Statement and the Prospectus) will be paid to any FINRA member, any persons associated with a FINRA member or an affiliate of a FINRA member. Except as disclosed in the Prospectus, the Company has not issued any warrants or other securities or granted any options, directly or indirectly, to the Representative or any of the Underwriters named on Schedule I hereto within the 180-day period prior to the initial filing date of the Prospectus. Except as disclosed in the Registration Statement and except for securities issued to the Representative as disclosed in the Prospectus and securities sold by the Representative on behalf of the Company, no person to whom securities of the Company have been privately issued within the 180-day period prior to the initial filing date of the Prospectus is a FINRA member, is a person associated with a FINRA member or is an affiliate of a FINRA member. To the Company's knowledge, no FINRA member participating in the Offering has a conflict of interest with the Company. For this purpose, a "conflict of interest" exists when a FINRA member, the parent or affiliate of a FINRA member or any person associated with a FINRA member in the aggregate beneficially own 5% or more of the Company's outstanding subordinated debt or common equity, or 5% or more of the Company's preferred equity. "FINRA member participating in the Offering" includes any associated person of a FINRA member that is participating in the Offering, any member of such associated person's immediate family and any affiliate of a FINRA member that is participating in the Offering. "Any person associated with a FINRA member" means (1) a natural person who is registered or has applied for registration under the rules of FINRA and (2) a sole proprietor, partner, officer, director, or branch manager of a FINRA member, or other natural person occupying a similar status or performing similar functions, or a natural person engaged in the investment banking or securities business who is directly or indirectly controlling or controlled by a FINRA member. When used in this Section 3.1(mm) the term "affiliate of a FINRA member" or "affiliated with a FINRA member" means an entity that controls, is controlled by or is under common control with a FINRA member. The Company will advise the Representative and G&M if it learns that any officer, director or owner of 5% or more of the Company's outstanding shares of Common Stock or Common Stock Equivalents is or becomes an affiliate or associated person of a FINRA member firm.

(mm) Officers' Certificate. Any certificate signed by any duly authorized officer of the Company and delivered to the Representative or G&M shall be deemed a representation and warranty by the Company to the Underwriters as to the matters covered thereby.

(nn) Board of Directors. The qualifications of the persons serving as board members and the overall composition of the Board of Directors comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder applicable to the Company and the rules of the Trading Market. At least one member of the Board of Directors qualifies as a "financial expert" as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and the rules of the Trading Market. In addition, at least a majority of the persons serving on the Board of Directors qualify as "independent" as defined under the rules of the Trading Market.

(oo) ERISA. The Company is not a party to an “employee benefit plan,” as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), which: (i) is subject to any provision of ERISA and (ii) is or was at any time maintained, administered or contributed to by the Company or any of its ERISA Affiliates (as defined hereafter). These plans are referred to collectively herein as the “Employee Plans.” An “ERISA Affiliate” of any person or entity means any other person or entity which, together with that person or entity, could be treated as a single employer under Section 414(b), (c), (m) or (o) of the Internal Revenue Code of 1986, as amended (the “Code”). Each Employee Plan has been maintained in material compliance with its terms and the requirements of applicable law. No Employee Plan is subject to Title IV of ERISA. The Registration Statement, Preliminary Prospectus and the Prospectus identify each employment, severance or other similar agreement, arrangement or policy and each material plan or arrangement required to be disclosed pursuant to the Rules and Regulations providing for insurance coverage (including any self-insured arrangements), workers’ compensation, disability benefits, severance benefits, supplemental unemployment benefits, vacation benefits or retirement benefits, or deferred compensation, profit-sharing, bonuses, stock options, stock appreciation rights or other forms of incentive compensation, or post-retirement insurance, compensation or benefits, which: (i) is not an Employee Plan; (ii) is entered into, maintained or contributed to, as the case may be, by the Company or any of its ERISA Affiliates; and (iii) covers any officer or director or former officer or director of the Company or any of its ERISA Affiliates. These agreements, arrangements, policies or plans are referred to collectively as “Benefit Arrangements”. Each Benefit Arrangement has been maintained in material compliance with its terms and with the requirements of applicable law. Except as disclosed in the Registration Statement, Preliminary Prospectus and the Prospectus, there is no liability in respect of post-retirement health and medical benefits for retired employees of the Company or any of its ERISA Affiliates, other than medical benefits required to be continued under applicable law. No “prohibited transaction”(as defined in either Section 406 of ERISA or Section 4975 of the Code) has occurred with respect to any Employee Plan; and each Employee Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which could cause the loss of such qualification.

#### **ARTICLE IV. OTHER AGREEMENTS OF THE PARTIES**

4.1 Amendments to Registration Statement. The Company has delivered, or will as promptly as practicable deliver, to the Underwriters complete conformed copies of the Registration Statement and of each consent and certificate of experts, as applicable, filed as a part thereof, and conformed copies of the Registration Statement (without exhibits), the Prospectus, as amended or supplemented, and the General Disclosure Package in such quantities and at such places as an Underwriter reasonably requests. Neither the Company nor any of its directors and officers has distributed and none of them will distribute, prior to the Closing Date, any offering material in connection with the offering and sale of the Securities other than the Prospectus, the General Disclosure Package and the Registration Statement. The Company shall not file any such amendment or supplement to which the Representative shall reasonably object in writing.

#### 4.2 Federal Securities Laws.

(a) Compliance. During the time when a Prospectus is required to be delivered under the Securities Act, the Company will use its best efforts to comply with all requirements imposed upon it by the Securities Act and the rules and regulations thereunder and the Exchange Act and the rules and regulations thereunder, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Securities in accordance with the provisions hereof and the Prospectus. If at any time when a Prospectus relating to the Securities is required to be delivered under the Securities Act, any event shall have occurred as a result of which, in the opinion of counsel for the Company or counsel for the Underwriters, the Prospectus, as then amended or supplemented, includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, or if it is necessary at any time to amend the Prospectus to comply with the Securities Act, the Company will notify the Underwriters promptly and prepare and file with the Commission, subject to Section 4.1 hereof, an appropriate amendment or supplement in accordance with Section 10 of the Securities Act.

(b) Exchange Act Registration. For a period of three years from the Execution Date, the Company will use its best efforts to maintain the registration of the Common Stock under the Exchange Act. The Company will not deregister the Common Stock under the Exchange Act without the prior written consent of the Representative.

(c) Free Writing Prospectuses. The Company represents and agrees that it has not made and will not make any offer relating to the Securities that would constitute an issuer free writing prospectus, as defined in Rule 433 of the rules and regulations under the Securities Act, without the prior written consent of the Representative. Any such free writing prospectus consented to by the Representative is herein referred to as a "Permitted Free Writing Prospectus." The Company represents that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus" as defined in rule and regulations under the Securities Act, and has complied and will comply with the applicable requirements of Rule 433 of the Securities Act, including timely Commission filing where required, legending and record keeping.

4.3 Delivery to the Underwriters of Prospectuses. The Company will deliver to the Underwriters, without charge, from time to time during the period when the Prospectus is required to be delivered under the Securities Act or the Exchange Act such number of copies of each Prospectus as the Underwriters may reasonably request and, as soon as the Registration Statement or any amendment or supplement thereto becomes effective, deliver to you two original executed Registration Statements, including exhibits, and all post-effective amendments thereto and copies of all exhibits filed therewith or incorporated therein by reference and all original executed consents of certified experts.

4.4 Effectiveness and Events Requiring Notice to the Underwriters. The Company will use its best efforts to cause the Registration Statement to remain effective with a current prospectus until the later of nine (9) months from the Execution Date and the date on which the Warrants are no longer outstanding, and will notify the Underwriters and holders of the Warrants immediately and confirm the notice in writing: (i) of the effectiveness of the Registration Statement and any amendment thereto; (ii) of the issuance by the Commission of any stop order or of the initiation, or the threatening, of any proceeding for that purpose; (iii) of the issuance by any state securities commission of any proceedings for the suspension of the qualification of the Securities for offering or sale in any jurisdiction or of the initiation, or the threatening, of any proceeding for that purpose; (iv) of the mailing and delivery to the Commission for filing of any amendment or supplement to the Registration Statement or Prospectus; (v) of the receipt of any comments or request for any additional information from the Commission; and (vi) of the happening of any event during the period described in this Section 4.4 that, in the judgment of the Company, makes any statement of a material fact made in the Registration Statement, the General Disclosure Package or the Prospectus untrue or that requires the making of any changes in the Registration Statement, the General Disclosure Package or the Prospectus in order to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Commission or any state securities commission shall enter a stop order or suspend such qualification at any time, the Company will make every reasonable effort to obtain promptly the lifting of such order.

4.5 Review of Financial Statements. For a period of three (3) years from the Execution Date, the Company, at its expense, shall cause its regularly engaged independent registered public accountants to review (but not audit) the Company's financial statements for each of the first three fiscal quarters prior to the announcement of quarterly financial information.

#### 4.6 Reports to the Underwriters: Expenses of the Offering

(a) Periodic Reports, etc. For a period of three years from the Execution Date, the Company will furnish or make available to the Underwriters copies of such financial statements and other periodic and special reports as the Company from time to time furnishes generally to holders of any class of its securities and also promptly furnish or make available to the Underwriters: (i) a copy of each periodic report the Company shall be required to file with the Commission; (ii) a copy of every press release and every news item and article with respect to the Company or its affairs which was released by the Company; (iii) a copy of each Form 8-K prepared and filed by the Company; and (iv) a copy of each registration statement filed by the Company under the Securities Act. Documents filed with the Commission pursuant to its EDGAR system shall be deemed to have been delivered to the Underwriters pursuant to this Section.

(b) Transfer Sheets. For a period of three years from the Execution Date, the Company shall retain the Transfer Agent or a transfer and registrar agent acceptable to the Representative and will furnish to the Underwriters at the Company's sole cost and expense such transfer sheets of the Company's securities as an Underwriter may reasonably request, including the daily and monthly consolidated transfer sheets of the Transfer Agent and the DTC.

(c) Trading Reports. During such time as the Closing Shares, Warrant Shares, the Pre-Funded Warrant Shares and the shares of Common Stock issuable upon exercise of the Underwriter's Warrant are listed on the Trading Market, the Company shall provide to the Underwriters, at the Company's expense, such reports published by the Trading Market relating to price and trading of such securities, as the Underwriters shall reasonably request.

(d) General Expenses Related to the Offering. (i) The Company hereby agrees to pay on each of the Closing Date and each Option Closing Date, if any, to the extent not paid at the Closing Date, all expenses incident to the performance of the obligations of the Company under this Agreement, including, but not limited to: (a) all filing fees and communication expenses relating to the registration of the Securities to be sold in the Offering (including the Option Securities) with the Commission; (b) all FINRA Public Offering Filing System fees associated with the review of the Offering by FINRA; all fees and expenses relating to the listing of such Closing Shares, Option Shares, Warrant Shares and the Pre-Funded Warrant Shares on the Trading Market and such other stock exchanges as the Company and the Representative together determine; (c) all fees, expenses and disbursements relating to the registration or qualification of such Securities under the "blue sky" securities laws of such states and other foreign jurisdictions as the Representative may reasonably designate; (d) the costs of all mailing and printing of the underwriting documents (including, without limitation, the Underwriting Agreement, any Blue Sky Surveys and, if appropriate, any Agreement Among Underwriters, any agreements with Selected Dealers, Underwriters' Questionnaire and Power of Attorney), Registration Statements, Prospectuses and all amendments, supplements and exhibits thereto and as many preliminary and final Prospectuses as the Representative may reasonably deem necessary; (e) the costs of preparing, printing and delivering the Securities; (f) fees and expenses of the Transfer Agent for the Securities (including, without limitation, any fees required for same-day processing of any instruction letter delivered by the Company); (g) stock transfer and/or stamp taxes, if any, payable upon the transfer of securities from the Company to the Underwriters; (h) the fees and expenses of the Company's accountants; (i) the fees and expenses of the Company's legal counsel and other agents and representatives up to a maximum of \$80,000; (j) the Underwriters' costs of mailing prospectuses to prospective investors; (k) all fees, expenses and disbursements relating to background checks of the Company's officers and directors; (l) the fees and expenses associated with the Underwriters' use of i-Deal's book-building, prospectus tracking and compliance software (or other similar software) for the Offering; and (m) the Company's actual "road show" expenses for the Offering. The Underwriters may also deduct from the net proceeds of the Offering payable to the Company on the Closing Date, or each Option Closing Date, if any, all out-of-pocket fees, expenses and disbursements (including legal fees and expenses) of the Underwriters incurred as a result of providing services related to the Offering to be paid by the Company to the Underwriters; *provided, however*, that all costs and expenses pursuant to this Section 4.6(d) that are incurred by the Underwriters shall not exceed \$100,000 in the aggregate (\$15,000 of which has been paid prior to the Execution Date) in the event of a Closing of the Offering, or \$35,000 in the event there is not a Closing (with the \$35,000 comprised as follows: up to a maximum of \$15,000 for the fees and expenses of the Company's legal counsel and up to a maximum of \$20,000 for other out-of-pocket expenses of the Underwriters).

4.7 Application of Net Proceeds. The Company will apply the net proceeds from the Offering received by it in a manner consistent with the application described under the caption "Use of Proceeds" in the Prospectus.

4.8 Delivery of Earnings Statements to Security Holders. The Company will make generally available to its security holders as soon as practicable, but not later than the first day of the fifteenth full calendar month following the Execution Date, an earnings statement (which need not be certified by independent public or independent certified public accountants unless required by the Securities Act or the rules and regulations under the Securities Act, but which shall satisfy the provisions of Rule 158(a) under Section 11(a) of the Securities Act) covering a period of at least twelve consecutive months beginning after the Execution Date. For the avoidance of doubt, documents filed with the Commission pursuant to its EDGAR system that contain the earnings statements required by this Section 4.8 shall be deemed to have been delivered to security holders and satisfy the requirements of this Section 4.8

4.9 Stabilization. Neither the Company, nor, to its knowledge, any of its employees, directors or shareholders (without the consent of the Representative) has taken or will take, directly or indirectly, any action designed to or that has constituted or that might reasonably be expected to cause or result in, under the Exchange Act, or otherwise, stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities.

4.10 Internal Controls. As disclosed in the SEC Reports, the Company intends to make changes necessary to enable it to maintain a system of internal accounting controls sufficient to provide reasonable assurances that: (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary in order to permit preparation of financial statements in accordance with GAAP and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

4.11 Accountants. For a period of three (3) years from the Effective Date, the Company shall continue to retain an independent registered public accounting firm. The Underwriters acknowledge that the Company Auditor is acceptable to the Underwriters.

4.12 FINRA. The Company shall advise the Underwriters (who shall make an appropriate filing with FINRA) if it is aware that any officer, director, 5% or greater shareholder of the Company or Person that received the Company's unregistered equity securities in the past 180 days is or becomes an affiliate or associated person of a FINRA member firm prior to the earlier of the termination of this Agreement or the conclusion of the distribution of the Offering.

4.13 No Fiduciary Duties. The Company acknowledges and agrees that the Underwriters' responsibility to the Company is solely contractual and commercial in nature, based on arms-length negotiations and that neither the Underwriters nor their affiliates or any selected dealer shall be deemed to be acting in a fiduciary capacity, or otherwise owes any fiduciary duty to the Company or any of its affiliates in connection with the Offering and the other transactions contemplated by this Agreement. Notwithstanding anything in this Agreement to the contrary, the Company acknowledges that the Underwriters may have financial interests in the success of the Offering that are not limited to the difference between the price to the public and the purchase price paid to the Company by the Underwriters for the shares and the Underwriters have no obligation to disclose, or account to the Company for, any of such additional financial interests. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against the Underwriters with respect to any breach or alleged breach of fiduciary duty.

4.14 Warrant Shares. If all or any portion of a Warrant is exercised at a time when there is an effective registration statement to cover the issuance of the Warrant Shares or if the Warrant is exercised via cashless exercise at a time when such Warrant Shares would be eligible for resale under Rule 144 by a non-affiliate of the Company, the Warrant Shares issued pursuant to any such exercise shall be issued free of all restrictive legends. If at any time following the date hereof the Registration Statement (or any subsequent registration statement registering the sale or resale of the Warrant Shares) is not effective or is not otherwise available for the sale of the Warrant Shares, the Company shall immediately notify the holders of the Warrants in writing that such registration statement is not then effective and thereafter shall promptly notify such holders when the registration statement is effective again and available for the sale of the Warrant Shares (it being understood and agreed that the foregoing shall not limit the ability of the Company to issue, or any holder thereof to sell, any of the Warrant Shares in compliance with applicable federal and state securities laws).

4.15 Board Composition and Board Designations. The Company shall ensure that: (i) the qualifications of the persons serving as board members and the overall composition of the Board of Directors comply with the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder and with the listing requirements of the Trading Market and (ii) if applicable, at least one member of the Board of Directors qualifies as a “financial expert” as such term is defined under the Sarbanes-Oxley Act of 2002 and the rules promulgated thereunder.

4.16 Securities Laws Disclosure: Publicity. At the request of the Representative, by 9:00 a.m. (New York City time) on the date hereof, or, if this Agreement is executed after 9:00 a.m. (New York City time) by the time reasonably requested by the Representative, the Company shall issue a press release disclosing the material terms of the Offering. The Company and the Representative shall consult with each other in issuing any press releases with respect to the Offering, and neither the Company nor any Underwriter shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any other press release of such Underwriter, or without the prior consent of such Underwriter, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. The Company will not issue press releases or engage in any other publicity, without the Representative’s prior written consent, for a period ending at 5:00 p.m. (New York City time) on the first business day following the 40th day following the Closing Date, other than normal and customary releases issued in the ordinary course of the Company’s business.

4.17 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Underwriter of the Securities is an “Acquiring Person” under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Underwriter of Securities could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities except if and to the extent required by applicable law.

4.18 Reservation of Common Stock. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Option Shares pursuant to the Over-Allotment Option, Warrant Shares pursuant to any exercise of the Warrants and shares of Common Stock issuable upon exercise of the Underwriter’s Warrants.

4.19 Listing of Common Stock. The Common Stock has been approved for trading on the Trading Market. The Company agrees to use its best efforts to effect and maintain the trading of the Common Stock on the Trading Market for at least three (3) years after the Closing Date.

4.20 Right of First Refusal. Upon the Closing of an Offering, for a period of twelve (12) months from such Closing, the Company grants the Representative a right of first refusal to act as underwriter and book running manager and/or placement agent for any and all of our future public or private equity, equity-linked or debt offerings during such twelve (12) month period of the Company, or any successor to or any subsidiary of the Company as follows: (i) if the gross proceeds of the Offering are \$5,000,000 or more, then the Representative will be entitled to 100% of the underwriting economics in these future offerings, and (ii) if the gross proceeds of the Offering are less than \$5,000,000, then the Representative will be entitled to 50% of the underwriting economics in such future offerings.

4.21 Subsequent Equity Sales.

(a) From the date hereof until one hundred thirty-five (135) days after the Closing Date, neither the Company nor any Subsidiary shall issue, enter into any agreement to issue or announce the issuance or proposed issuance of any shares of Common Stock or Common Stock Equivalents.

(b) From the date hereof until one hundred thirty-five (135) day days after the Closing Date, the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or a combination of units thereof) involving a Variable Rate Transaction. "Variable Rate Transaction" means a transaction in which the Company (i) issues or sells any debt or equity securities that are convertible into, exchangeable or exercisable for, or include the right to receive, additional shares of Common Stock either (A) at a conversion price, exercise price or exchange rate or other price that is based upon, and/or varies with, the trading prices of or quotations for the shares of Common Stock at any time after the initial issuance of such debt or equity securities or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Stock or (ii) enters into, or effects a transaction under, any agreement, including, but not limited to, an equity line of credit, whereby the Company may issue securities at a future determined price. Any Underwriter shall be entitled to obtain injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages.

(c) Notwithstanding the foregoing, this Section 4.21 shall not apply in respect of an Exempt Issuance, except that no Variable Rate Transaction shall be an Exempt Issuance.

4.22 Capital Changes. Until sixty (60) days after the Closing Date, the Company shall not undertake a reverse or forward stock split or reclassification of the Common Stock without the prior written consent of Maxim.

4.23 Research Independence. The Company acknowledges that each Underwriter's research analysts and research departments, if any, are required to be independent from their respective investment banking divisions and are subject to certain regulations and internal policies, and that such Underwriter's research analysts may hold and make statements or investment recommendations and/or publish research reports with respect to the Company and/or the offering that differ from the views of its investment bankers. The Company hereby waives and releases, to the fullest extent permitted by law, any claims that the Company may have against such Underwriter with respect to any conflict of interest that may arise from the fact that the views expressed by their independent research analysts and research departments may be different from or inconsistent with the views or advice communicated to the Company by such Underwriter's investment banking divisions. The Company acknowledges that each Representative is a full service securities firm and as such from time to time, subject to applicable securities laws, may effect transactions for its own account or the account of its customers and hold long or short position in debt or equity securities of the Company.

4.24 Tail Period. Notwithstanding any other provision of this Agreement, including, but not limited to, Section 4.20 of this Agreement, for a period of twelve months from the date of this Agreement, if the Company receives any proceeds from any investor introduced to the Company by the Representative during the course of this Offering, the Company agrees to pay to the Representative a cash fee equal to 8.0% of such proceeds.

**ARTICLE V.**  
**DEFAULT BY UNDERWRITERS**

If on the Closing Date or any Option Closing Date, if any, any Underwriter shall fail to purchase and pay for the portion of the Closing Securities or Option Securities, as the case may be, which such Underwriter has agreed to purchase and pay for on such date (otherwise than by reason of any default on the part of the Company), the Representative, or if a Representative is the defaulting Underwriter, the non-defaulting Underwriters, shall use their reasonable efforts to procure within 36 hours thereafter one or more of the other Underwriters, or any others, to purchase from the Company such amounts as may be agreed upon and upon the terms set forth herein, the Closing Securities or Option Securities, as the case may be, which the defaulting Underwriter or Underwriters failed to purchase. If during such 36 hours the Representative shall not have procured such other Underwriters, or any others, to purchase the Closing Securities or Option Securities, as the case may be, agreed to be purchased by the defaulting Underwriter or Underwriters, then (a) if the aggregate number of Closing Securities or Option Securities, as the case may be, with respect to which such default shall occur does not exceed 10% of the Closing Securities or Option Securities, as the case may be, covered hereby, the other Underwriters shall be obligated, severally, in proportion to the respective numbers of Closing Securities or Option Securities, as the case may be, which they are obligated to purchase hereunder, to purchase the Closing Securities or Option Securities, as the case may be, which such defaulting Underwriter or Underwriters failed to purchase, or (b) if the aggregate number of Closing Securities or Option Securities, as the case may be, with respect to which such default shall occur exceeds 10% of the Closing Securities or Option Securities, as the case may be, covered hereby, the Company or the Representative will have the right to terminate this Agreement without liability on the part of the non-defaulting Underwriters or of the Company except to the extent provided in Article VI hereof. In the event of a default by any Underwriter or Underwriters, as set forth in this Article V, the applicable Closing Date may be postponed for such period, not exceeding seven days, as the Representative, or if a Representative is the defaulting Underwriter, the non-defaulting Underwriters, may determine in order that the required changes in the Prospectus or in any other documents or arrangements may be effected. The term "Underwriter" includes any person substituted for a defaulting Underwriter. Any action taken under this Section shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

**ARTICLE VI.  
INDEMNIFICATION 1**

6.1 Indemnification of the Underwriters. The Company shall indemnify and hold harmless each Underwriter, its affiliates, the directors, officers, employees and agents of such Underwriter and each person, if any, who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act from and against any and all losses, claims, liabilities, expenses and damages (including any and all investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding between any of the indemnified parties and any indemnifying parties or between any indemnified party and any third party, or otherwise, or any claim asserted), to which they, or any of them, may become subject under the Securities Act, the Exchange Act or other federal or state statutory law or regulation, at common law or otherwise, insofar as such losses, claims, liabilities, expenses or damages arise out of or are based on (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Securities Act and the rules and regulations thereunder, as applicable, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in any preliminary prospectus, any preliminary prospectus supplement, any Permitted Free Writing Prospectus or the Prospectus (or any amendment or supplement to any of the foregoing) or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading or (iii) any untrue statement or alleged untrue statement of a material fact contained in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities, including any roadshow or investor presentations made to investors by the Company (whether in person or electronically) (collectively, Marketing Materials ") or the omission or alleged omission therefrom of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided, however*, that the Company shall not be liable to the extent that such loss, claim, liability, expense or damage is based on any untrue statement or omission or alleged untrue statement or omission made in reliance on and in conformity with Underwriters' Information. This indemnity agreement will be in addition to any liability that the Company might otherwise have. For all purposes of this Agreement, the information set forth in the Prospectus in the "Price Stabilization, Short Positions and Penalty Bids" and "Electronic Distribution" sections under the caption "Underwriting" constitutes the only information (the "Underwriters' Information") relating to the Underwriters furnished in writing to the Company by the Underwriters through the Representative specifically for inclusion in the preliminary prospectus, the Registration Statement or the Prospectus. With respect to any untrue statement or omission or alleged untrue statement or omission made in the General Disclosure Package, the indemnity agreements contained in this Section 6.1 shall not inure to the benefit of any Underwriter Indemnified Party to the extent that any loss, liability, claim, damage or expense of such Underwriter Indemnified Party results from the fact that a copy of the Prospectus was not given or sent to the person asserting any such loss, liability, claim, damage at or prior to written confirmation of sale of the Public Securities to such person as required by the Securities Act, and if the untrue statement or omission had been corrected in the Prospectus, unless the failure to deliver the Prospectus was a result of non-compliance by the Company with its obligations under Section 4.3 hereof.

6.2 Indemnification of the Company. Each Underwriter, severally and not jointly, agrees to indemnify and hold harmless the Company, its affiliates, the directors, officers, employees and agents of the Company and each other person or entity, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, against any losses, liabilities, claims, damages and expenses whatsoever, as incurred (including but not limited to reasonable attorneys' fees and any and all reasonable expenses whatsoever, incurred in investigating, preparing or defending against any litigation, commenced or threatened, or any claim whatsoever, and any and all amounts paid in settlement of any claim or litigation), joint or several, to which they or any of them may become subject under the Securities Act, the Exchange Act or otherwise, insofar as such losses, liabilities, claims, damages or expenses (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430B of the Securities Act and the rules and regulations thereunder, any Preliminary Prospectus, the Prospectus, or any amendment or supplement to any of them, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that any such loss, liability, claim, damage or expense (or action in respect thereof) arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon the Underwriters' Information; provided, however, that in no case shall any Underwriter be liable or responsible for any amount in excess of the underwriting discount and commissions applicable to the Securities purchased by such Underwriter hereunder.

6.3 Indemnification Procedures. Any party that proposes to assert the right to be indemnified under this Section 6 shall, promptly after receipt of notice of commencement of any action against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section 6, notify each such indemnifying party of the commencement of such action, enclosing a copy of all papers served, but the omission so to notify such indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party under the foregoing provisions of this Section 6 unless, and only to the extent that, such omission results in the forfeiture of substantive rights or defenses by the indemnifying party. If any such action is brought against any indemnified party and it notifies the indemnifying party of its commencement, the indemnifying party will be entitled to participate in and, to the extent that it elects by delivering written notice to the indemnified party promptly after receiving notice of the commencement of the action from the indemnified party, jointly with any other indemnifying party similarly notified, to assume the defense of the action, with counsel reasonably satisfactory to the indemnified party, and after notice from the indemnifying party to the indemnified party of its election to assume the defense, the indemnifying party will not be liable to the indemnified party for any legal or other expenses except as provided below and except for the reasonable out-of-pocket costs of investigation subsequently incurred by the indemnified party in connection with the defense. The indemnified party will have the right to employ its own counsel in any such action, but the fees, expenses and other charges of such counsel will be at the expense of such indemnified party unless (i) the employment of counsel by the indemnified party has been authorized in writing by one of the indemnifying parties in connection with the defense of such action, (ii) the indemnified party has reasonably concluded (based on advice of counsel) that there may be legal defenses available to it or other indemnified parties that are different from or in addition to those available to the indemnifying party, (iii) the indemnified party has reasonably concluded that a conflict or potential conflict exists (based on advice of counsel to the indemnified party) between the indemnified party and the indemnifying party (in which case the indemnifying party shall not have the right to direct the defense of such action on behalf of the indemnified party), (iv) the indemnifying party does not diligently defend the action after assumption of the defense, or (v) the indemnifying party has not in fact employed counsel reasonably satisfactory to the indemnified party to assume the defense of such action within a reasonable time after receiving notice of the commencement of the action, in each of which cases the reasonable fees, disbursements and other charges of counsel shall be at the expense of the indemnifying party or parties. It is understood that the indemnifying party or parties shall not, in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the reasonable fees, disbursements and other charges of more than one separate firm admitted to practice in such jurisdiction at any one time for all such indemnified party or parties. All such fees, disbursements and other charges shall be reimbursed by the indemnifying party promptly as they are incurred. An indemnifying party shall not be liable for any settlement of any action or claim effected without its written consent (which consent will not be unreasonably withheld or delayed). No indemnifying party shall, without the prior written consent of each indemnified party, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action or proceeding relating to the matters contemplated by this Section 6 (whether or not any indemnified party is a party thereto), unless (x) such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising or that may arise out of such claim, action or proceeding and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party, and (y) the indemnifying party confirms in writing its indemnification obligations hereunder with respect to such settlement, compromise or judgment. Notwithstanding the foregoing, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a) effected without its written consent if (A) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (B) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

6.4 Contribution. In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in the foregoing paragraphs of this Section 6 is applicable in accordance with its terms but for any reason is held to be unavailable, the Company and the Underwriters shall contribute to the total losses, claims, liabilities, expenses and damages (including any investigative, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted, but after deducting any contribution received by the Company from persons other than the Underwriters, such as persons who control the Company within the meaning of the Securities Act, officers of the Company who signed the Registration Statement and directors of the Company, who may also be liable for contribution), to which the Company and the Underwriter may be subject in such proportion as shall be appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Securities pursuant to this Agreement. The relative benefits received by the Company and the Underwriters shall be deemed to be in the same proportion as (x) the total proceeds from the Offering (net of underwriting discount and commissions but before deducting expenses) received by the Company bears to (y) the underwriting discount and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. If, but only if, the allocation provided by the foregoing sentence is not permitted by applicable law, the allocation of contribution shall be made in such proportion as is appropriate to reflect not only the relative benefits referred to in the foregoing sentence but also the relative fault of the Company, on the one hand, and the Underwriters, on the other, with respect to the statements or omissions which resulted in such loss, claim, liability, expense or damage, or action in respect thereof, as well as any other relevant equitable considerations with respect to such offering. Such relative fault shall be determined by reference to whether the untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters, the intent of the parties and their relative knowledge, access to information and opportunity to correct or prevent such statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this Section 6.4 were to be determined by pro rata allocation or by any other method of allocation (even if the Underwriters were treated as one entity for such purpose) which does not take into account the equitable considerations referred to herein. The amount paid or payable by an indemnified party as a result of the loss, claim, liability, expense or damage, or action in respect thereof, referred to above in this Section 6.4 shall be deemed to include, for purpose of this Section 6.4, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 6.4, no Underwriter shall be required to contribute any amount in excess of the underwriting discounts and commissions received by it. No person found guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 6.4, any person who controls a party to this Agreement within the meaning of the Securities Act will have the same rights to contribution as that party, and each officer of the Company who signed the Registration Statement will have the same rights to contribution as the Company, and each director, officer, employee, counsel or agent of an Underwriter will have the same rights to contribution as such Underwriter, subject in each case to the provisions hereof. Any party entitled to contribution, promptly after receipt of notice of commencement of any action against such party in respect of which a claim for contribution may be made under this Section 6.4, will notify any such party or parties from whom contribution may be sought, but the omission so to notify will not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have under this Section 6.4. The obligations of the Underwriters to contribute pursuant to this Section 6.4 are several in proportion to the respective number of Securities to be purchased by each of the Underwriters hereunder and not joint. No party will be liable for contribution with respect to any action or claim settled without its written consent (which consent will not be unreasonably withheld).

6.5 Survival. The indemnity and contribution agreements contained in this Section 6 and the representations and warranties of the Company contained in this Agreement shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or any controlling Person thereof, (ii) acceptance of any of the Securities and payment therefor or (iii) any termination of this Agreement.

**ARTICLE VII.  
MISCELLANEOUS**

**7.1 Termination.**

(a) Termination Right. The Representative shall have the right to terminate this Agreement at any time prior to any Closing Date, (i) if any domestic or international event or act or occurrence has materially disrupted, or in their opinion will in the immediate future materially disrupt, general securities markets in the United States; or (ii) if trading on any Trading Market shall have been suspended or materially limited, or minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required by FINRA or by order of the Commission or any other government authority having jurisdiction, or (iii) if the United States shall have become involved in a new war or an increase in major hostilities, which will, in the Representative's opinion, make it inadvisable to proceed with the delivery of the Securities or (iv) if a banking moratorium has been declared by a New York State or federal authority, or (v) if a moratorium on foreign exchange trading has been declared which materially adversely impacts the United States securities markets, or (vi) if the Company shall have sustained a material loss by fire, flood, accident, hurricane, earthquake, theft, sabotage or other calamity or malicious act which, whether or not such loss shall have been insured, will, in the Representative's opinion, make it inadvisable to proceed with the delivery of the Securities, or (vii) if the Company is in material breach of any of its representations, warranties or covenants hereunder, or (viii) if the Representative shall have become aware after the date hereof of such a material adverse change in the conditions or prospects of the Company, or such adverse material change in general market conditions as in the Representative's judgment would make it impracticable to proceed with the offering, sale and/or delivery of the Securities or to enforce contracts made by the Underwriters for the sale of the Securities.

(b) Expenses. In the event this Agreement shall be terminated pursuant to Section 7.1(a), within the time specified herein or any extensions thereof pursuant to the terms herein, the Company shall be obligated to pay to Maxim its actual and accountable out-of-pocket expenses related to the transactions contemplated herein then due and payable up to \$35,000, of which \$15,000 has been paid prior to the Execution Date) (provided, however, that such expense cap in no way limits or impairs the indemnification and contribution provisions of this Agreement).

(c) Indemnification. Notwithstanding any contrary provision contained in this Agreement, any election hereunder or any termination of this Agreement, and whether or not this Agreement is otherwise carried out, the provisions of Article VI shall not be in any way effected by such election or termination or failure to carry out the terms of this Agreement or any part hereof.

7.2 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, any Preliminary Prospectus and the Prospectus, contain the entire understanding of the parties with respect to the subject matter hereof and thereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules. Notwithstanding anything herein to the contrary, the Engagement Agreement, dated January 22, 2020 ("Engagement Agreement"), by and between the Company and Maxim, shall continue to be effective and the terms therein, including, without limitation, Section 14 with respect to any future offerings, shall continue to survive and be enforceable by Maxim in accordance with its terms, provided that, in the event of a conflict between the terms of the Engagement Agreement and this Agreement, the terms of this Agreement shall prevail.

7.3 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail attachment at the email address set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or e-mail attachment at the e-mail address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd ) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto.

7.4 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and Maxim. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

7.5 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

7.6 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns.

7.7 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any action, suit or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action or proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Article VI, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding.

7.8 Survival. The representations and warranties contained herein shall survive the Closing and the Option Closing, if any, and the delivery of the Securities.

7.9 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to each other party, it being understood that the parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

7.10 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

7.11 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, the Underwriters and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agree to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.

7.12 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

7.13 Construction. The parties agree that each of them and/or their respective counsel have reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments thereto. In addition, each and every reference to share prices and shares of Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

**7.14 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVE FOREVER ANY RIGHT TO TRIAL BY JURY.**

*(Signature Pages Follow)*

If the foregoing correctly sets forth the understanding between the Underwriters and the Company, please so indicate in the space provided below for that purpose, whereupon this letter shall constitute a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very truly yours,

**SUMMIT WIRELESS TECHNOLOGIES, INC.**

By: \_\_\_\_\_  
Name:  
Title:

Address for Notice:

6840 Via Del Oro Ste. 280  
San Jose, California 95119  
Facsimile: ( ) [\_\_\_\_]  
Attention: Chief Executive Officer

**Copy to:**  
Sullivan & Worcester LLP  
1633 Broadway  
New York, NY 10019  
Facsimile: ( ) [\_\_\_\_]  
Attention: David E. Danovitch

Accepted by the Representative, acting for itself and as Representative of the Underwriters named on Schedule I hereto, as of the date first above written:

**MAXIM GROUP LLC**

By: \_\_\_\_\_  
Name: Clifford A. Teller  
Title: Executive Managing Director, Investment Banking

Address for Notice:

405 Lexington Avenue  
New York, NY 10174  
Facsimile: (212) 895-3783  
Attention: Clifford A. Teller

**Copy to:**  
Gracin & Marlow, LLP  
405 Lexington Avenue, 26th Floor  
New York, New York 10174  
Facsimile: (212) 208-4657  
Attention: Leslie Marlow

**SCHEDULE 1**

Schedule of Underwriters

<b>Underwriter</b>	<b>Total Number of Closing Shares to be Purchased</b>	<b>Total Number of Pre-Funded Warrants to be Purchased</b>	<b>Total Number of Traditional Warrants to be Purchased</b>	<b>Number of Option Shares to be Purchased if the Over-Allotment Option is Fully Exercised</b>	<b>Number of Option Warrants to be Purchased if the Over-Allotment Option is Fully Exercised</b>
Maxim Group LLC					
<b>TOTAL</b>					

**SCHEDULE 2**

**List of Lock-Up Parties**

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Exhibit A

Form of Lock-Up Agreement

\_\_\_\_\_, 2020

Maxim Group LLC  
405 Lexington Avenue  
New York, New York 10174

**Re: Summit Wireless Technologies, Inc., Inc.—Public Offering**

Ladies and Gentlemen:

The undersigned, a holder of common stock, par value \$0.0001 per share (“**Shares**”), or rights to acquire Shares, of Summit Wireless Technologies, Inc., Inc. (the “**Company**”), understands that you are the representative (the “**Representative**”) of the several underwriters (collectively, the “**Underwriters**”) named or to be named in the final form of the underwriting agreement (the “**Underwriting Agreement**”) to be entered into among the Underwriters and the Company, providing for the public offering (the “**Public Offering**”) of Shares and, if applicable, other securities (collectively, the “**Securities**”) pursuant to a registration statement filed or to be filed with the U.S. Securities and Exchange Commission (the “**SEC**”). Capitalized terms used herein and not otherwise defined shall have the meanings set forth for them in the Underwriting Agreement.

In consideration of the Underwriters’ agreement to enter into the Underwriting Agreement and to proceed with the Public Offering of the Securities, and for other good and valuable consideration, receipt of which is hereby acknowledged, the undersigned hereby agrees, for the benefit of the Company, the Representative and the other Underwriters that, without the prior written consent of the Representative, the undersigned will not, during the period specified in the following paragraph (the “**Lock-Up Period**”), directly or indirectly, unless otherwise provided herein, (a) offer, sell, agree to offer or sell, solicit offers to purchase, grant any call option or purchase any put option with respect to, pledge, encumber, assign, borrow or otherwise dispose of (each a “**Transfer**”) any Relevant Security (as defined below) or otherwise publicly disclose the intention to do so, or (b) establish or increase any “put equivalent position” or liquidate or decrease any “call equivalent position” with respect to any Relevant Security (in each case within the meaning of Section 16 of the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”), and the rules and regulations thereunder) with respect to any Relevant Security or otherwise enter into any swap, derivative or other transaction or arrangement that Transfers to another, in whole or in part, any economic consequence of ownership of a Relevant Security, whether or not such transaction is to be settled by the delivery of Relevant Securities, other securities, cash or other consideration, or otherwise publicly disclose the intention to do so. As used herein, the term “**Relevant Security**” means any Share, warrant to purchase Shares or any other security of the Company or any other entity that is convertible into, or exercisable or exchangeable for, Shares or any other equity security of the Company, in each case owned beneficially or otherwise by the undersigned on the date of closing of the Public Offering or acquired by the undersigned during the Lock-Up Period.

The restrictions in the foregoing paragraph shall not apply to any exercise (including a cashless exercise or broker-assisted exercise and payment of tax obligations) of options or warrants to purchase Shares; provided that any Shares received upon such exercise, conversion or exchange will be subject to this Lock-Up Period. The Lock-Up Period will commence on the date of this Lock-up Agreement and continue and include the date that is ninety (90) days after the closing of the Public Offering.

In addition, the undersigned further agrees that, except for the registration statement filed or to be filed in connection with the Public Offering, during the Lock-Up Period the undersigned will not, without the prior written consent of the Representative: (a) file or participate in the filing with the SEC of any registration statement or circulate or participate in the circulation of any preliminary or final prospectus or other disclosure document, in each case with respect to any proposed offering or sale of a Relevant Security, or (b) exercise any rights the undersigned may have to require registration with the SEC of any proposed offering or sale of a Relevant Security.

In furtherance of the undersigned's obligations hereunder, the undersigned hereby authorizes the Company during the Lock-Up Period to cause any transfer agent for the Relevant Securities to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, Relevant Securities for which the undersigned is the record owner and the transfer of which would be a violation of this Lock-Up Agreement and, in the case of Relevant Securities for which the undersigned is the beneficial but not the record owner, agrees that during the Lock-Up Period it will cause the record owner to cause the relevant transfer agent to decline to transfer, and to note stop transfer restrictions on the stock register and other records relating to, such Relevant Securities to the extent such transfer would be a violation of this Lock-Up Agreement.

Notwithstanding the foregoing, the undersigned may transfer the undersigned's Relevant Securities:

- (i) as a *bona fide* gift or gifts,
- (ii) to any trust, partnership, limited liability company or other legal entity commonly used for estate planning purposes which is established for the direct or indirect benefit of the undersigned or a member of members of the immediate family of the undersigned,
- (iii) if the undersigned is a corporation, partnership, limited liability company, trust or other business entity (1) to another corporation, partnership, limited liability company, trust or other business entity that is a direct or indirect affiliate (as defined in Rule 405 under the Securities Act of 1933, as amended) of the undersigned, (2) to limited partners, limited liability company members or stockholders of the undersigned, or (3) in connection with a sale, merger or transfer of all or substantially all of the assets of the undersigned or any other change of control of the undersigned, not undertaken for the purpose of avoiding the restrictions imposed by this Lock-Up Agreement,
- (iv) if the undersigned is a trust, to the beneficiary of such trust,
- (v) by testate or intestate succession,
- (vi) by operation of law, such as pursuant to a qualified domestic order or in connection with a divorce settlement, or
- (vii) pursuant to the Underwriting Agreement;

*provided*, in the case of clauses (i)-(vi), that (A) such transfer shall not involve a disposition for value, (B) the transferee agrees in writing with the Underwriters and the Company to be bound by the terms of this Lock-Up Agreement, and (C) such transfer would not require any filing under Section 16(a) of the Exchange Act and no such filing is voluntarily made.

For purposes of this Lock-Up Agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin.

The undersigned hereby represents and warrants that the undersigned has full power and authority to enter into this Lock-Up Agreement and that this Lock-Up Agreement has been duly authorized (if the undersigned is not a natural person) and constitutes the legal, valid and binding obligation of the undersigned, enforceable in accordance with its terms. Upon request, the undersigned will execute any additional documents necessary in connection with the enforcement hereof. Any obligations of the undersigned shall be binding upon the successors and assigns of the undersigned from the date of this Lock-Up Agreement.

The undersigned understands that, if the Underwriting Agreement does not become effective, or if the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Securities to be sold thereunder, the undersigned shall be released from all obligations under this Lock-Up Agreement.

The undersigned, whether or not participating in the Public Offering, understands that the Underwriters are entering into the Underwriting Agreement and proceeding with the Public Offering in reliance upon this Lock-Up Agreement.

This Lock-Up Agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof. Delivery of a signed copy of this Lock-Up Agreement by facsimile or e-mail/.pdf transmission shall be effective as the delivery of the original hereof.

Very truly yours,

Signature: \_\_\_\_\_

Name (printed):

Title (if applicable):

Entity (if applicable):

Exhibit B

Form of Traditional Warrant

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Exhibit C

Form of Warrant Agreement

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Exhibit D

Form of Underwriter's Warrant Agreement

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Exhibit E

Form of Pre-Funded Warrant

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## PRE-FUNDED COMMON STOCK PURCHASE WARRANT

## SUMMIT WIRELESS TECHNOLOGIES, INC.

Warrant Shares: \_\_\_\_\_

Initial Exercise Date: [\_\_\_\_], 2020

THIS PRE-FUNDED COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, \_\_\_\_\_ or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the date hereof (the "Initial Exercise Date") until this Warrant is exercised in full (the "Termination Date") but not thereafter, to subscribe for and purchase from Summit Wireless Technologies, Inc., a Delaware corporation (the "Company"), up to \_\_\_\_\_ shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. In addition to the terms defined elsewhere in this Warrant, the following terms have the meanings indicated in this Section 1:

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

"Bid Price" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the bid price of the Common Stock for the time in question (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported on the Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

"Business Day" means any day except any Saturday, any Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

"Commission" means the United States Securities and Exchange Commission.

"Common Stock" means the common stock of the Company, par value \$0.0001 per share, and any other class of securities into which such securities may hereafter be reclassified or changed.

“Common Stock Equivalents” means any securities of the Company or the Subsidiaries which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, right, option, warrant or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Registration Statement” means the Company’s registration statement on Form S-1, as amended (File No. 333-237516).

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Subsidiary” means any subsidiary of the Company which is actively engaged in a trade or business, and shall, where applicable, also include any direct or indirect subsidiary of the Company formed or acquired after the date hereof.

“Trading Day” means a day on which the Common Stock is traded on a Trading Market. “Trading Market” means any of the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or the New York Stock Exchange (or any successors to any of the foregoing).

“Transfer Agent” means VStock Transfer, the current transfer agent of the Company with a mailing address of 8 Lafayette Pl, Woodmere, New York 11598, a phone number of (212) 828-8436 and an email address of shay@vstocktransfer.com, and any successor transfer agent of the Company.

“VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported on the Pink Open Market (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“Warrants” means this Warrant and other Pre-Funded Common Stock purchase warrants issued by the Company pursuant to the Registration Statement.

Section 2. Exercise.

a ) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Initial Exercise Date and on or before the Termination Date by delivery to the Company of a duly executed or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the “Notice of Exercise”). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i) herein) following the date of exercise as aforesaid, the Holder shall deliver the aggregate Exercise Price for the shares specified in the applicable Notice of Exercise by wire transfer unless the cashless exercise procedure specified in Section 2(c) below is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within five (5) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Trading Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b ) Exercise Price. The aggregate exercise price of this Warrant, except for a nominal exercise price of \$0.01 per Warrant Share, was pre-funded to the Company on or prior to the Initial Exercise Date and, consequently, no additional consideration (other than the nominal exercise price of \$0.01 per Warrant Share) shall be required to be paid by the Holder to any Person to effect any exercise of this Warrant. The Holder shall not be entitled to the return or refund of all, or any portion, of such pre-paid aggregate exercise price under any circumstance or for any reason whatsoever, including in the event this Warrant shall not have been exercised prior to the Termination Date. The remaining unpaid exercise price per share of Common Stock under this Warrant shall be \$0.01, subject to adjustment hereunder (the “Exercise Price”).

c ) Cashless Exercise. If at the time of exercise hereof there is no effective registration statement registering, or the prospectus contained therein is not available for the issuance of the Warrant Shares to the Holder, then this Warrant may also be exercised, in whole or in part, at such time by means of a “cashless exercise” in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

- (A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of “regular trading hours” (as defined in Rule 600(b)(68) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. as of the time of the Holder’s execution of the applicable Notice of Exercise if such Notice of Exercise is executed during “regular trading hours” on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of “regular trading hours” on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of “regular trading hours” on such Trading Day;
- (B) = the Exercise Price of this Warrant, as adjusted hereunder; and
- (X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the registered characteristics of the Warrants being exercised. The Company agrees not to take any position contrary to this Section 2(c).

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder's or its designee's balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system ("DWAC") if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) this Warrant is being exercised via cashless exercise, and otherwise by physical delivery of a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) two (2) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) one (1) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise (such date, the "Warrant Share Delivery Date"). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period following delivery of the Notice of Exercise. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), \$10 per Trading Day (increasing to \$20 per Trading Day on the fifth Trading Day after such liquidated damages begin to accrue) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, "Standard Settlement Period" means the standard settlement period, expressed in a number of Trading Days, on the Company's primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise. Notwithstanding the foregoing, with respect to any Notice(s) of Exercise delivered on or prior to 12:00 p.m. (New York City time) on the Initial Exercise Date, which may be delivered at any time after the time of execution of the Underwriting Agreement, dated April [ ], 2020 between the Company and Maxim Group LLC, the Company agrees to deliver the Warrant Shares subject to such notice(s) by 4:00 p.m. (New York City time) on the Initial Exercise Date.

i i. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall round down to the nearest whole share.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares.

vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) Holder's Exercise Limitations. The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one (1) Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% (or, upon election by a Holder prior to the issuance of any Warrants, 9.99%) of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

Section 3. Certain Adjustments.

a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (iv) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b ) Subsequent Rights Offerings. In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of shares of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c ) Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to all holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) except to the extent an adjustment was already made pursuant to Section 3(a) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") to assume in writing all of the obligations of the Company under this Warrant in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant with the same effect as if such Successor Entity had been named as the Company herein.

e) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

f) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by email to the Holder at its last email address as it shall appear upon the Warrant Register of the Company, at least ten (10) Trading Days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

Section 4. Transfer of Warrant.

a) Transferability. This Warrant and all rights hereunder are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within five (5) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the initial issuance date of this Warrant and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise; No Settlement in Cash. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof as set forth in Section 2(d)(i), except as expressly set forth in Section 3. Without limiting the rights of a Holder to receive Warrant Shares on a "cashless exercise," and to receive the cash payments contemplated pursuant to Sections 2(d)(i) and 2(d)(iv), in no event will the Company be required to net cash settle a Warrant exercise.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Trading Day, then, such action may be taken or such right may be exercised on the next succeeding Trading Day.

d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the holders of a majority of the then outstanding Warrants (based on the number of Warrant Shares underlying such Warrants), the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Warrant (whether brought against a party hereto or their respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is improper or is an inconvenient venue for such proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Warrant and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If either party shall commence an action, suit or proceeding to enforce any provisions of this Warrant, the prevailing party in such action, suit or proceeding shall be reimbursed by the other party for their reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such action or proceeding. Notwithstanding the foregoing, nothing in this paragraph shall limit or restrict the federal district court in which a Holder may bring a claim under the federal securities laws.

f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered, and the Holder does not utilize cashless exercise, will have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Exercise, shall be in writing and delivered personally, by e-mail, or sent by a nationally recognized overnight courier service, addressed to the Company, at 6840 Via Del Oro, Suite 280, San Jose, California 95119, Attention: Chief Executive Officer; e-mail address: [\_\_\_\_], or such other email address or address as the Company may specify for such purposes by notice to the Holders. Any and all notices or other communications or deliveries to be provided by the Company hereunder shall be in writing and delivered personally, by e-mail, or sent by a nationally recognized overnight courier service addressed to each Holder at the e-mail address or address of such Holder appearing on the books of the Company. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (a) the time of transmission, if such notice or communication is delivered via e-mail attachment at the email address set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via e-mail attachment at the e-mail address as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2nd) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.

m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

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*(Signature Page Follows)*

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**SUMMIT WIRELESS TECHNOLOGIES, INC.**

By: \_\_\_\_\_  
Name:  
Title:

**NOTICE OF EXERCISE**

TO: **SUMMIT WIRELESS TECHNOLOGIES, INC.**

(1) The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only required if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States by wire transfer; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number:

Name of broker (if applicable): \_\_\_\_\_

DTC number: \_\_\_\_\_

Account name: \_\_\_\_\_

Account number: \_\_\_\_\_

[SIGNATURE OF HOLDER]

Name of Investing Entity: \_\_\_\_\_

*Signature of Authorized Signatory of Investing Entity:* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

Date: \_\_\_\_\_

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**ASSIGNMENT FORM**

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: \_\_\_\_\_  
(Please Print)

Address: \_\_\_\_\_  
(Please Print)

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature: \_\_\_\_\_

Holder's Address: \_\_\_\_\_

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Sullivan & Worcester LLP  
1633 Broadway  
New York, NY 10019

212 660 3000  
sullivanlaw.com

April 20, 2020

Summit Wireless Technologies, Inc.  
6840 Via Del Oro, Ste. 280  
San Jose, CA 95119

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-1, as amended (the "Registration Statement"), filed by Summit Wireless Technologies, Inc., a Delaware corporation (the "Company"), with the U.S. Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the proposed offering (the "Offering") of (a) an aggregate of \$7,475,000 of shares (the "Shares") of the Company's common stock, par value \$0.0001 per share (the "Common Stock"), (b) warrants to purchase up to an aggregate of \$7,475,000 of shares of Common Stock (the "Warrants") (and the shares of Common Stock that are issuable from time to time upon exercise of the Warrants (the "Warrant Shares")), (c) to each purchaser whose purchase of shares of Common Stock in the Offering would otherwise result in a purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% (or, at the election of the holder, 9.99%) of the Company's outstanding shares of Common Stock immediately following the consummation of the Offering, the opportunity to purchase, if such purchaser so chooses, pre-funded common stock purchase warrants (the "Pre-Funded Warrants"), in lieu of shares of Common Stock (and the shares of Common Stock that are issuable from time to time upon exercise of the Pre-Funded Warrants (the "Pre-Funded Warrant Shares"). and (d) up to \$390,000 of warrants issuable to the underwriters and its representative (the "Underwriters' Warrants") to purchase up to such number of shares of Common Stock equal to 5% of the aggregate number of Shares issued by the Company in the Offering (the "Underwriters' Warrant Shares"). Each Pre-Funded Warrant will be exercisable for one share of Common Stock. For each Pre-Funded Warrant that is sold, the number of Shares offered will be decreased on a one-for-one basis. The Shares, Pre-Funded Warrants, Warrants, Pre-Funded Warrant Shares, Warrant Shares, Underwriters' Warrants and Underwriters' Warrant Shares are referred to herein collectively as the "Securities."

We are acting as special counsel for the Company in connection with the Registration Statement. In connection with this opinion, we have examined and relied upon the originals or copies certified or otherwise identified to our satisfaction of the Registration Statement, including the exhibits filed therewith, and have also examined and relied upon minutes of meetings and resolutions of the board of directors of the Company as provided to us by the Company, the certificate of incorporation and bylaws of the Company, each as restated and/or amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinion hereinafter set forth.

In addition to the foregoing, we have relied as to matters of fact upon the representations made by the Company and its representatives. In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents. Other than our examination of the documents indicated above, we have made no other examination in connection with this opinion.

We are members of the Bar of the State of New York. We do not hold ourselves out as being conversant with, or expressing any opinion with respect to, the laws of any jurisdiction other than the laws of the State of New York and the General Corporation Law of the State of Delaware (the "DGCL"). Accordingly, the opinions expressed herein are expressly limited to the laws of the State of New York and the DGCL. Our opinion is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any other jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state law, rule or regulation relating to securities, or to the sale or issuance thereof.

Our opinions set forth below with respect to the validity or binding effect of any security or obligation may be limited by (i) bankruptcy, insolvency, reorganization, fraudulent conveyance, marshaling, moratorium or other similar laws affecting the enforcement generally of the rights and remedies of creditors and secured parties or the obligations of debtors, (ii) general principles of equity (whether considered in a proceeding in equity or at law), including but not limited to principles limiting the availability of specific performance or injunctive relief, and concepts of materiality, reasonableness, good faith and fair dealing, (iii) the possible unenforceability under certain circumstances of provisions providing for indemnification, contribution, exculpation, release or waiver that may be contrary to public policy or violative of federal or state securities laws, rules or regulations, and (iv) the effect of course of dealing, course of performance, oral agreements or the like that would modify the terms of an agreement or the respective rights or obligations of the parties under an agreement.

Based upon and subject to the foregoing, we are of the opinion that (i) the Securities have been duly authorized for issuance by all necessary corporate action by the Company; (ii) the Shares, when issued and sold as described in the Registration Statement, will be validly issued, fully paid and non-assessable, (iii) provided that the Pre-Funded Warrants, Warrants and Underwriters' Warrants have been duly executed and delivered by the Company and duly delivered to the purchasers thereof against payment therefor, such Pre-Funded Warrants, Warrants and Underwriters' Warrants, when sold and issued as contemplated in the Registration Statement, will be valid and binding obligations of the Company, and (iv) the shares of Common Stock issuable pursuant to each of the Pre-Funded Warrants, Warrants and Underwriters' Warrants upon payment to the Company of the required consideration, and when issued and sold by the Company and paid for in accordance with the terms of the Pre-Funded Warrants, Warrants or Underwriters' Warrants, as applicable, and as described in the Registration Statement, will be validly issued, fully paid and non-assessable.

This opinion letter speaks only as of the date hereof and we assume no obligation to update or supplement this opinion letter if any applicable laws change after the date of this opinion letter or if we become aware after the date of this opinion letter of any facts, whether existing before or arising after the date hereof, that might change the opinions expressed above.

This opinion is furnished in connection with the filing of the Registration Statement and may not be relied upon for any other purpose without our prior written consent in each instance. Further, no portion of this opinion may be quoted, circulated or referred to in any other document for any other purpose without our prior written consent.

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We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to this firm under the caption "Legal Matters" in the Registration Statement. In giving such consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ Sullivan & Worcester LLP

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Amendment No. 2 to the Registration Statement on Form S-1 of our report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the consolidated financial statements) dated March 24, 2020, relating to the consolidated financial statements of Summit Wireless Technologies, Inc., which appears in the Annual Report on Form 10-K of Summit Wireless Technologies, Inc. for the year ended December 31, 2019. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ BPM LLP

San Jose, California  
April 19, 2020

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