
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**



Akoustis Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

**9805 Northcross Center Court, Suite A
Huntersville, NC 28078**
(Address of principal executive offices,
including zip code)

33-1229046
(I.R.S. Employer
Identification Number)

**AKOUSTIS, INC. 2014 STOCK PLAN
AKOUSTIS TECHNOLOGIES, INC. 2015 EQUITY INCENTIVE PLAN**
(Full title of the plan)

**Jeffrey B. Shealy
Chief Executive Officer
Akoustis Technologies, Inc.
9805 Northcross Center Court, Suite A
Huntersville, NC 28078
(704) 997-5735**
(Name, address and telephone number, including area code,
of agent for service)

Copy to:

**Adam P. Wheeler, Esq.
Womble Bond Dickinson (US) LLP
1200 Nineteenth Street NW, Suite 500
Washington, DC 20036
(202) 467-6900**

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

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share	Proposed maximum aggregate offering price	Amount of registration fee
Common Stock, par value \$0.001 per share	1,125,636(2)	\$ 5.81(4)	\$ 6,539,945.16(4)	\$ 814.22
	160,000(3)	\$ 5.81(5)	\$ 929,600.00(5)	\$ 115.74
Total:	1,285,636			\$ 929.96

- (1) This registration statement (the "Registration Statement") also covers additional shares of common stock, \$0.001 par value per share (the "Common Stock") of Akoustis Technologies, Inc. (the "Company" or the "Registrant") that may be issuable pursuant to the antidilution provisions of the Plans (as defined below) by reason of any stock splits, stock dividends or similar transactions as permitted by Rule 416(a) and Rule 416(b) under the Securities Act of 1933, as amended (the "Securities Act").
 - (2) This Registration Statement registers 1,125,636 shares of the Registrant's Common Stock, of which 516,815 shares were issued under the Registrant's 2014 Stock Plan, as amended (the "2014 Plan"), and 608,821 shares were issued under the Registrant's 2015 Equity Incentive Plan, as amended (the "2015 Plan" and, together with the 2014 Plan, the "Plans").
 - (3) This Registration Statement also registers 160,000 shares of Common Stock that may be issued pursuant to outstanding stock options (the "Options") previously granted under the 2015 Plan.
 - (4) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and 457(h) of the Securities Act, based upon: the average (\$5.81) of the high (\$5.8874) and low (\$5.73) prices of the Company's Common Stock, as reported by the NASDAQ Stock Market LLC on February 5, 2018.
 - (5) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) and 457(h) of the Securities Act, based upon the weighted average of the exercise price for the Options.
-

EXPLANATORY NOTE

This Registration Statement contains two parts. The first part contains a “reoffer” prospectus prepared in accordance with Part I of Form S-3 (in accordance with Instruction C of the General Instructions to Form S-8). The prospectus permits reoffers and resales of those shares referred to above that constitute “control securities” or “restricted securities” within the meaning of Form S-8, by certain of the Company’s stockholders, as more fully set forth therein. Pursuant to the Note to Part I of Form S-8, the plan information specified by Part I of Form S-8 is not required to be filed with the Securities and Exchange Commission (the “SEC”). The second part contains information required to be set forth in the registration statement pursuant to Part II of Form S-8. The Company will provide without charge to any person, upon written or oral request of such person, a copy of each document incorporated by reference in Item 3 of Part II of this Registration Statement (which documents are also incorporated by reference in the prospectus as set forth in Form S-8), other than exhibits to such documents that are not specifically incorporated by reference, the other documents required to be delivered to eligible employees pursuant to Rule 428(b) under the Securities Act and additional information about the Plans.

REOFFER PROSPECTUS



AKOUSTIS TECHNOLOGIES, INC.
9805 Northcross Center Court, Suite A
Huntersville, NC 28078
(704) 997-5735

1,285,636 SHARES OF COMMON STOCK

This reoffer prospectus relates to 1,285,636 shares of our common stock, par value \$0.001 per share (“Common Stock”), that may be offered and resold from time to time by certain eligible participants (each, an “Eligible Participant”) in our 2014 Stock Plan, as amended (the “2014 Plan”) and our 2015 Equity Incentive Plan, as amended (the “2015 Plan” and, together with the 2014 Plan, the “Plans”) for their own account. Eligible Participants in our Plans consist of employees, directors, officers and consultants of our company or its related entities. Selling stockholders will consist of those Eligible Participants who are “affiliates” of our company (as defined in Rule 405 under the Securities Act of 1933, as amended (the “Securities Act”)).

The selling stockholders may offer and sell their shares of Common Stock at various times and in various types of transactions, including sales in the open market, sales in negotiated transactions and sales by a combination of these methods. Shares may be sold at the market price of the Common Stock at the time of a sale, at prices relating to the market price over a period of time, or at prices negotiated with the buyers of shares. The shares may be sold through underwriters or dealers which the selling stockholders may select. If underwriters or dealers are used to sell the shares, we will name them and describe their compensation in a prospectus supplement. For a description of the various methods by which the selling stockholders may offer and sell their Common Stock described in this prospectus, see the section entitled “Plan of Distribution” on page 28 of this prospectus. We will receive no part of the proceeds from sales made under this prospectus. The selling stockholders will bear all sales commissions and similar expenses. Any other expenses incurred by us in connection with the registration and offering and not borne by the selling stockholders will be borne by us.

The shares of Common Stock will be issued pursuant to awards granted under the Plans and will be “control securities” or “restricted securities” under the Securities Act before their sale under this prospectus. This prospectus has been prepared for the purposes of registering the shares under the Securities Act to allow for future sales by selling stockholders on a continuous or delayed basis to the public without restriction. The number of shares of Common Stock to be offered or resold by means of this prospectus by each selling stockholder may not exceed, during any three-month period, the amount specified in Rule 144(e) under the Securities Act.

Our Common Stock is traded on the NASDAQ Capital Market (“NASDAQ”) under the symbol “AKTS.” On February 6, 2018, the last reported sale price for our Common Stock was \$6.02 per share.

Our business and an investment in our securities involve a high degree of risk. Before making any investment in our securities, you should read and carefully consider risks described in the “Risk Factors” section beginning on page 8 of this prospectus.

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.

The date of this prospectus is February 7, 2018

You should rely only on the information contained in this prospectus. We have not authorized any other person to provide you with information that is different from that contained in this prospectus. If anyone provides you with different or inconsistent information, you should not rely on it. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. The selling stockholders are offering to sell and seeking offers to buy these securities only in jurisdictions where offers and sales are permitted. You should assume that the information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our Common Stock. Our business, financial condition, results of operations and prospects may have changed since that date. We are not making an offer of any securities in any jurisdiction where the offer is not permitted.

TABLE OF CONTENTS

	<u>Page</u>
Prospectus Summary	1
Note Regarding Forward-Looking Statements	6
Risk Factors	8
Determination of Offering Price	22
Use of Proceeds	22
Description of Securities	23
Selling Stockholders	24
Plan of Distribution	29
Legal Matters	29
Experts	29
Material Changes	30
Where You Can Find More Information	30
Incorporation By Reference	30
Indemnification of Directors and Officers	31

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus. This summary is not complete and does not contain all of the information that should be considered before investing in our Common Stock. Potential investors should read the entire prospectus carefully, including the more detailed information regarding our business provided below in the “Description of Business” section and the risks of purchasing our Common Stock discussed under the “Risk Factors” section.

Unless the context indicates or requires otherwise, all references in this registration statement to “Akoustis Technologies,” “Akoustis,” the “Company,” “we,” “us” and “our” refer to Akoustis Technologies, Inc. and its wholly owned consolidated subsidiaries, Akoustis, Inc., and Akoustis Manufacturing New York, Inc., each of which are Delaware corporations.

This prospectus includes the trademarks of Akoustis, Inc., Akoustis™ and BulkOne®, See “Description of Business - Intellectual Property”. All references to Akoustis and BulkOne® in this prospectus are intended to include reference to such trademarks.

Overview

Akoustis is an early stage company focused on developing, designing and manufacturing innovative radio frequency (RF) filter products for the mobile wireless device industry. We use a patented fundamentally new piezoelectric resonator technology that we call BulkONE® in the manufacturing of bulk acoustic wave (BAW) resonators, the building blocks of high selectivity “RF” filters required to route signals in a smartphone or other mobile or wearable device, cellular infrastructure and WiFi routers. Filters are a critical component of the RF front-end (RFFE), and their use has multiplied with the launch and licensing of 4G/LTE, emerging 5G and WiFi frequency bands. They are used to define the range of frequencies of radio signals that are transmitted (the “passband”) and simultaneously reject unwanted signals.

We plan to use single-crystal piezoelectric materials to develop a new class of BAW RF filters with a fundamental advantage to reduce losses over existing thin film RF filter technologies. We believe our technology will be disruptive to the RFFE market through the following expected advantages:

- Wider bandwidth coverage,
- Smaller filter supports higher level of integration and lower manufacturing costs,
- Lower insertion loss,
- Improved power compression and linearity,
- Reduced power amplifier cost, for the ultimate purpose of manufacturing our BAW RF filters,
- Reduced heat generation and reduced battery loading, and
- Reduced guard band between adjacent frequency bands.

Once our technology is qualified for mass production, we expect to design and sell single-crystal BAW RF filter products using our BulkONE® technology. Our product focus is on innovative single-band filter products for the growing smartphone and RFFE module market, which can be used to make duplexer or multiplexer filter products necessary for the mobile market. These products present the greatest near-term potential for commercialization of our technology. According to a Mobile Experts May 2016 report, the mobile filter market is expected to grow from \$8.2 billion in 2017 to greater than \$12 billion by 2021.

For a glossary of technical terms used herein, see “Glossary” below.

Recent Developments

On March 23, 2017, we entered into an Asset Purchase Agreement and a Real Property Purchase Agreement (collectively, the “STC-MEMS Agreements”) with The Research Foundation for the State University of New York (“RF-SUNY”) and Fuller Road Management Corporation (“FRMC”), an affiliate of RF-SUNY (collectively, “Sellers”), respectively, to acquire certain specified assets, including STC-MEMS, a semiconductor wafer-manufacturing and microelectromechanical systems (“MEMS”) operation with associated wafer-manufacturing tools, and the associated real estate and improvements located in Canandaigua, New York used in the operation of STC-MEMS (the assets and real estate and improvements referred to together herein as the “STC-MEMS Business”). Pursuant to the STC-MEMS Agreements, the Company agreed to assume substantially all of the ongoing obligations of the STC-MEMS Business incurred in the ordinary course of business following the acquisition date.

We completed the acquisition of the STC-MEMS Business through our wholly-owned subsidiary, Akoustis Manufacturing New York, Inc., a Delaware corporation formed in connection with the acquisition, on June 26, 2017 for an aggregate purchase price of \$2.8 million in cash. The Company recorded net assets acquired of \$6.3 million for purchase consideration of \$4.6 million (includes \$2.85 million of cash paid at closing plus \$1.7 million real estate contingent liability), which resulted in the recording of a bargain purchase gain of \$1.7 million.

The STC-MEMS acquisition allows the Company to internalize manufacturing, increase capacity and control its wafer supply chain for single crystal BAW RF filters. We have now successfully transferred our research and development (“R&D”) resonator filter process flow into the facility, which recently received ISO 9001:2015 certification. We plan to utilize the facility to optimize our BulkONE® technology and to consolidate all aspects of wafer manufacturing for our disruptive and patented high band BAW RF filters targeting the multi-billion dollar mobile and other wireless markets. This planned consolidation of the Company’s supply chain into the STC-MEMS Business started on June 26, 2017 and is expected to shorten time-to-market for our RF products, greatly enhancing our ability to service customers upon completion of development and design specifications. Furthermore, we believe that shorter time-to-market cycles provide us with the opportunity to increase the number of our potential customers.

In November 2017, we announced our first shipment of high performance single-crystal BAW diplexer filter module prototypes. These initial prototypes were shipped pursuant to a customer engagement and purchase order announced by the Company in May 2017. The purchase order covers the cost of engineering development and initial delivery of BAW RF diplexers for band-specific applications in the frequency spectrum below 1.5GHz. Akoustis expects follow on shipments of small form-factor bandpass diplexer filter solutions that replace larger legacy-filter technology, which enables system miniaturization without trading off performance.

This is the fourth BAW filter prototype shipment that Akoustis has recently made. In August and September 2017, AKTS separately announced first shipments of high performance LTE-TDD Band 41, 2.6 GHz BAW RF filter prototypes that it believes will satisfy the challenging filter requirements in the high growth 4G LTE mobile market in China, a first shipment of premium high-band BAW filter prototypes for a radar application that will operate with a passband between 3.5GHz and 3.9GHz, and a first shipment of the industry’s first single-crystal 5.2GHz BAW RF filters for 802.11ac Tri-Band WiFi routers.

In December 2017, the Company closed a private placement in which it sold an aggregate 2,640,819 shares of Common Stock at \$5.50 per share for aggregate gross proceeds before expenses of \$14,524,504.

Capital Needs

The Company believes that it has sufficient cash to fund its operations into the first quarter of fiscal 2019. However, there is no assurance that the Company’s projections and estimates are accurate. In the event that the Company does not obtain the funds needed to develop its technology and enable future sales, or the Company experiences costs in excess of estimates to continue its R&D plan, it is possible that the Company would not have sufficient resources to continue as a going concern for the next year; these matters raise substantial doubt about the Company’s ability to continue as a going concern. In order to mitigate these risks, the Company is actively managing and controlling the Company’s cash outflows.

About This Offering

This prospectus relates to the public offering, which is not being underwritten, by the selling stockholders listed in this prospectus, of up to 1,285,636 shares of our Common Stock. Of the shares being offered, 1,125,636 are presently issued and outstanding and 160,000 are issuable upon exercise of stock options. The shares offered by this prospectus may be sold by the selling stockholders from time to time in the open market, through negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices. We will receive none of the proceeds from the sale of the shares by the selling stockholders. We will bear all expenses of registration incurred in connection with this offering, but all selling and other expenses incurred by the selling stockholders will be borne by them.

Selected Risks Associated with an Investment in Shares of Our Common Stock

An investment in shares of our Common Stock is highly speculative and is subject to numerous risks described in the section entitled "Risk Factors" and elsewhere in this prospectus. You should carefully consider these risks before making an investment. Some of these risks include:

- We have a limited operating history upon which investors can evaluate our business and future prospects.
- We have a history of losses (we have incurred net losses of approximately \$21.2 million for the period from May 12, 2014 (inception) to September 30, 2017), will need substantial additional funding to continue our operations and may not achieve or sustain profitability in the future.
- If we are unable to obtain additional financing on acceptable terms, we may have to curtail our growth or cease our development plans and operations.
- You could lose all of your investment.
- You may experience dilution of your ownership interests because of the future issuance of additional shares of our common or preferred stock or other securities that are convertible into or exercisable for our common or preferred stock.
- We may not generate revenues or achieve profitability.
- Our products may not be able to be commercialized or accepted in the market.
- If we are unable to establish effective marketing and sales capabilities or enter into agreements with third parties to market and sell our RF filters, we may not be able to effectively generate product revenues.
- If we fail to obtain, maintain and enforce our intellectual property rights, we may not be able to prevent third parties from using our proprietary technologies and may lose access to technologies critical to our products.

Corporate Information

Our principal executive offices are located at 9805 Northcross Center Court, Suite A, Huntersville, North Carolina 28078. Our telephone number is (704) 997-5735. Our website address is <http://www.akoustis.com>. The information on, or that can be accessed through, our website is not part of this prospectus.

Implications of Being an Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012. We will remain an emerging growth company until the earlier of (i) June 30, 2019, the last day of the fiscal year following the fifth anniversary of the date of the first sale of our Common Stock pursuant to an effective registration statement under the Securities Act; (ii) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (iii) the date on which we have issued more than \$1 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under applicable SEC rules. We expect that we will remain an emerging growth company for the foreseeable future, but cannot retain our emerging growth company status indefinitely and will no longer qualify as an emerging growth company on or before June 30, 2019. We refer to the Jumpstart Our Business Startups Act of 2012 herein as the "JOBS Act," and references herein to "emerging growth company" have the meaning associated with it in the JOBS Act. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from specified disclosure requirements that are applicable to other public companies that are not emerging growth companies.

These exemptions include:

- not being required to comply with the requirement of auditor attestation of our internal control over financial reporting,
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements,
- reduced disclosure obligations regarding executive compensation, and
- not being required to hold a nonbinding advisory vote on executive compensation (“say-on-pay”), and on the frequency of say-on-pay, and stockholder approval of any golden parachute payments not previously approved.

For as long as we continue to be an emerging growth company, we expect that we will take advantage of the reduced disclosure obligations available to us as a result of that classification. We have taken advantage of certain of those reduced reporting burdens in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

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. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected to avail ourselves of this extended transition period, and as a result, we will not be required to adopt new or revised accounting standards on the dates on which adoption of such standards is required for other public reporting companies.

We are also a “smaller reporting company” as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and have elected to take advantage of certain of the scaled disclosure requirements available for smaller reporting companies.

Glossary

The following is a glossary of technical terms used herein:

- **Acoustic wave** — a mechanical wave that vibrates in the same direction as its direction of travel.
- **AlN** — Aluminum Nitride
- **Acoustic wave filter** — an electromechanical device that provides radio frequency control and selection, in which an electrical signal is converted into a mechanical wave in a device constructed of a piezoelectric material and then back to an electrical signal.
- **Band, channel or frequency band** — a designated range of radio wave frequencies used to communicate with a mobile device.
- **Bulk acoustic wave (BAW)** — an acoustic wave traveling through a material exhibiting elasticity, typically vertical or perpendicular to the surface of a piezoelectric material.
- **Digital baseband** — the digital transceiver, which includes the main processor for the communication device.

- **Diplexer** — a device that can split and combine different wireless signals, for example, permitting two transmitters to share the same antenna.
- **Duplexer** — a bi-directional device that connects the antenna to the transmitter and receiver of a wireless device and simultaneously filters both the transmit signal and receive signal.
- **Filter** — a series of interconnected resonators designed to pass (or select) a desired radio frequency signal and block unwanted signals.
- **Insertion Loss** —The power losses associated with inserting a BAW filter into a circuit.
- **Piezoelectric materials** — certain solid materials (such as crystals and certain ceramics) that produce a voltage in response to applied mechanical stress, or that deform when a voltage is applied to them.
- **Quality factor, or Q** — energy stored divided by the energy dissipated per cycle. Higher Q represents a higher caliber of resonance, and implies mechanical and electrical factors responsible for energy dissipation are minimal. For a given amount of energy stored in a resonator, Q represents the number of cycles resonance will continue without additional input of energy into the system.
- **Resonator** — a device whose impedance sharply changes over a narrow frequency range and is characterized by one or more ‘resonance frequency’ due to a standing wave across the resonator’s electrodes. The vibrations in a resonator can be characterized by mechanical “acoustic” waves which travel without a characteristic sound velocity. Resonators are the building blocks for RF filters used in mobile wireless devices.
- **RF** — radio frequency.
- **RF front-end (RFFE)** — the circuitries in a mobile device responsible for processing the analog radio signals and is located between the device’s antenna and the digital baseband.
- **TDD LTE** — Time Division Duplex- Long-Term Evolution or a wireless standard which shares the bandwidth between transmit and receive.
- **Trusted Foundry**— The Trusted Foundry Program was initiated by the Department of Defense in 2004 to ensure mission-critical national defense systems access to leading-edge integrated circuits from secure, domestic sources. Defense Microelectronics Activity (DMEA) is the manager of the Trusted Foundry Program for the U.S. Department of Defense (DoD). It is a joint DoD / National Security Agency (NSA) program and is administered by the NSA’s Trusted Access Program Office (TAPO).
- **Wafer** — a thin slice of semiconductor material used in electronics for the fabrication of integrated circuits.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements, including, without limitation, in the sections captioned “Description of Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and elsewhere. Any and all statements contained in this prospectus that are not statements of historical fact may be deemed forward-looking statements. Terms such as “may,” “might,” “would,” “should,” “could,” “project,” “estimate,” “predict,” “potential,” “strategy,” “anticipate,” “attempt,” “develop,” “plan,” “help,” “believe,” “continue,” “intend,” “expect,” “future,” and terms of similar import (including the negative of any of the foregoing) may be intended to identify forward-looking statements. However, not all forward-looking statements may contain one or more of these identifying terms. Forward-looking statements in this prospectus may include, without limitation, statements regarding (i) the plans and objectives of management for future operations, including plans or objectives relating to the development of commercially viable radio frequency filters, (ii) a projection of income (including income/loss), earnings (including earnings/loss) per share, capital expenditures, dividends, capital structure or other financial items, (iii) our future financial performance, including any such statement contained in a discussion and analysis of financial condition by management or in the results of operations included pursuant to the rules and regulations of the SEC, (iv) our ability to efficiently utilize cash and cash equivalents to support our operations for a given period of time, (v) our ability to engage customers while maintaining ownership of our intellectual property, and (vi) the assumptions underlying or relating to any statement described in points (i) through (v) above.

The forward-looking statements are not meant to predict or guarantee actual results, performance, events or circumstances and may not be realized because they are based upon our current projections, plans, objectives, beliefs, expectations, estimates and assumptions and are subject to a number of risks and uncertainties and other influences, many of which are beyond our control. Actual results and the timing of certain events and circumstances may differ materially from those described by the forward-looking statements as a result of these risks and uncertainties. Factors that may influence or contribute to the inaccuracy of the forward-looking statements or cause actual results to differ materially from expected or desired results may include, without limitation:

- our inability to obtain adequate financing,
- our limited operating history,
- our inability to generate significant revenues or achieve profitability,
- the results of our research and development (R&D) activities,
- our inability to achieve acceptance of our products in the market,
- general economic conditions, including upturns and downturns in the industry,
- our limited number of patents,
- failure to obtain, maintain and enforce our intellectual property rights,
- our inability to attract and retain qualified personnel,
- our reliance on third parties to complete certain processes in connection with the manufacture of our products,
- product quality and defects,
- existing or increased competition,
- our ability to market and sell our products,
- our inability to successfully integrate our STC-MEMS Business (as defined below under “Description of Business – Recent Developments – Business Developments”) in our business,
- our failure to innovate or adapt to new or emerging technologies,

- our failure to comply with regulatory requirements,
- results of any arbitration or litigation that may arise,
- stock volatility and illiquidity,
- our failure to implement our business plans or strategies,
- our failure to remediate the material weaknesses in our internal control over financial reporting, and
- our failure to maintain the Trusted Foundry accreditation of our New York fabrication facility.

A description of some of the risks and uncertainties that could cause our actual results to differ materially from those described by the forward-looking statements in this prospectus appears in the section captioned “Risk Factors” and elsewhere in this prospectus. Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them and to the risk factors. Except as may be required by law, we do not undertake any obligation to update the forward-looking statements contained in this prospectus to reflect any new information or future events or circumstances or otherwise.

RISK FACTORS

An investment in shares of our Common Stock is highly speculative and involves a high degree of risk. We face a variety of risks that may affect our operations or financial results and many of those risks are driven by factors that we cannot control or predict. Before investing in our Common Stock, you should carefully consider the following risks, together with the financial and other information contained in this prospectus. If any of the following risks actually occurs, our business, prospects, financial condition and results of operations could be materially adversely affected. In that case, the trading price of our Common Stock would likely decline and you may lose all or a part of your investment. Only those investors who can bear the risk of loss of their entire investment should invest in our Common Stock.

Prospective investors should consider carefully whether an investment in the Company is suitable for them in light of the information contained in this prospectus and the financial resources available to them. The risks described below do not purport to be all the risks to which the Company or the Company could be exposed. This section is a summary of the risks that we presently believe are material to the operations of the Company. Additional risks of which we are not presently aware or which we presently deem immaterial may also impair the Company's business, financial condition or results of operations.

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

We have a limited operating history upon which investors can evaluate our business and future prospects.

We are an early stage company that has not yet begun any commercial operations. Historically, we were a shell company with no operating history and no assets other than cash. Upon consummation of a merger with Akoustis, Inc. in May 2015, we redirected our business focus towards the development of advanced single-crystal BAW filter products for RF front-ends (RFFE) for use in the mobile wireless device industry. Although Akoustis since its inception focused its activity on R&D of high efficiency acoustic wave resonator technology utilizing single-crystal piezoelectric materials, this technology has not yet obtained marketing approval or been verified in commercial manufacturing, and its RF filters have not generated any material level of sales.

Since our expectations of potential customers and future demand for our products are based on estimates of planned operations rather than experience, it is difficult for our management and our investors to accurately forecast and evaluate our future prospects and our revenues. Our proposed operations are therefore subject to all of the risks inherent in light of the expenses, difficulties, complications and delays frequently encountered in connection with the formation of any new business and the development of a product, as well as those risks that are specific to our business in particular. An investment in an early stage company such as ours involves a degree of risk, including the possibility that your entire investment may be lost. The risks include, but are not limited to, our reliance on third parties to complete some processes for the manufacturing of our product, the possibility that we will not be able to develop functional and scalable products, or that although functional and scalable, our products and/or services will not be accepted in the market. To successfully introduce and market our products at a profit, we must establish brand name recognition and competitive advantages for our products. There are no assurances that the Company can successfully address these challenges. If it is unsuccessful, the Company and its business, financial condition and operating results will be materially and adversely affected.

We may not generate revenues or achieve profitability.

We have incurred operating losses since our inception and expect to continue to have negative cash flow from operations. We have only generated minimal revenues from shipment of product while our primary sources of funds have been R&D grants, private placements of our equity, and debt. We have experienced net losses of approximately \$21.2 million for the period from May 12, 2014 (inception) to September 30, 2017. Our future profitability will depend on our ability to create a sustainable business model and generate revenues, which is subject to a number of factors, including our ability to successfully implement our strategies and execute our R&D plan, our ability to implement our improved design and cost reductions into manufacturing of our RF filters, the availability of funding, market acceptance of our products, consumer demand for end products incorporating our products, our ability to compete effectively in a crowded field, our ability to respond effectively to technological advances by timely introducing our new technologies and products, and global economic and political conditions.

Our future profitability also depends on our expense levels, which are influenced by a number of factors, including the resources we devote to developing and supporting our projects and potential products, the continued progress of our research and development of potential products, our ability to improve R&D efficiencies, license fees or royalties we may be required to pay, and the potential need to acquire licenses to new technology, the availability of intellectual property for licensing or acquisition, or the use of our technology in new markets, which could require us to pay unanticipated license fees and royalties in connection with these licenses.

Our development and commercialization efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenues to offset higher expenses. These expenses, among other things, may cause our net income and working capital to decrease. If we fail to generate revenue and manage our expenses, we may never achieve profitability, which would adversely and materially affect our ability to provide a return to our investors.

The industry and the markets in which the Company operates are highly competitive and subject to rapid technological change.

The markets in which we intend to compete are intensely competitive. We will operate primarily in the industry that designs and produces semiconductor components for wireless communications and other wireless devices, which is subject to rapid changes in both product and process technologies based on demand and evolving industry standards. The intended markets for our products are characterized by:

- rapid technological developments and product evolution,
- rapid changes in customer requirements,
- frequent new product introductions and enhancements,
- continuous demand for higher levels of integration, decreased size and decreased power consumption,
- short product life cycles with declining prices over the life cycle of the product, and
- evolving industry standards.

The continuous evolutions of these technologies and frequent introduction of new products and enhancements have generally resulted in short product life cycles for wireless semiconductor products, in general, and for RFFE's, in particular. Our R&D activity and resulting products could become obsolete or less competitive sooner than anticipated because of a faster than anticipated change in one or more of the above-noted factors. Therefore, in order for our RF filters to be competitive and achieve market acceptance, we need to keep pace with rapid development of new process technologies, which requires us to:

- respond effectively to technological advances by timely introducing our new technologies and products,
- successfully implement our strategies and execute our R&D plan in practice,
- improve the efficiency of our technology, and
- implement our improved design and cost reductions into manufacturing of our RF filters.

We are still developing our products, and they may not be accepted in the market.

Although we believe that our BulkONE® acoustic wave resonator technology that utilizes single-crystal piezoelectric materials will provide material advantages over existing RF filters and are currently developing various methods of integration suitable for implementation of this technology to RF filters, we cannot be certain that our RF filters will be able to achieve or maintain market acceptance. While we have fabricated R&D resonators that demonstrate the feasibility of our BulkONE® technology, we are still in the process of stabilizing this technology into our NY fabrication facility for manufacturing of our RF filters, and this technology is not verified yet in practice or on a commercial scale. There are also no records that can demonstrate our ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields. In addition to our limited operating history, we will depend on a limited number of manufacturers and customers for a significant portion of our revenue in the future and we cannot guarantee their acceptance of our products. Each of these factors may adversely affect our ability to implement our business strategy and achieve our business goals.

The successful development of our BulkONE® technology and market acceptance of our RF filters will be highly complex and will depend on the following principal competitive factors, including our ability to:

- comply with industry standards and effectively compete against current technology for producing RF acoustic wave filters,
- differentiate our products from offerings of our competitors by delivering RF filters that are higher in quality, reliability and technical performance,
- anticipate customer and market requirements, changes in technology and industry standards and timely develop improved technologies that meet high levels of satisfaction of our potential customers,
- maintain, grow and manage our internal teams to the extent we increase our operations and develop new segments of our business,
- develop and maintain successful collaborative, strategic, and other relationships with manufacturers, customers and contractors,
- protect, develop or otherwise obtain adequate intellectual property for our technology and our filters, and
- obtain strong financial, sales, marketing, technical and other resources necessary to develop, test, manufacture, commercialize and market our filters.

If we are unsuccessful in accomplishing these objectives, we may not be able to compete successfully against current and potential competitors. As a result, our BulkOne® technology and our RF filters may not be accepted in the market and we may never attain profitability.

We will face intense competition, which may cause pricing pressures, decreased gross margins and loss of potential market share and may materially and adversely affect our business, financial condition and results of operations.

We will compete with U.S. and international semiconductor manufacturers and mobile semiconductor companies of all sizes in terms of resources and market share, some of whom have significantly greater financial, technical, manufacturing and marketing resources than we do. We expect competition in our markets to intensify as new competitors enter the RF component market, existing competitors merge or form alliances, and new technologies emerge. Our competitors may introduce new solutions and technologies that are superior to our BAW technology, are verified on a commercial scale, and have achieved widespread market acceptance. Certain of our competitors may be able to adapt more quickly than we can to new or emerging technologies and changes in customer requirements or may be able to devote greater resources to the development, promotion and sale of their products than we can. This implementation may require us to modify the manufacturing process for our filters, design new products to more stringent standards, and redesign some existing products, which may prove difficult for us and result in delays in product deliveries and increased expenses.

Increased competition could also result in pricing pressures, declining average selling prices for our RF filters, decreased gross margins and loss of potential market share. We will need to make substantial investments to develop these enhancements and technologies, and we cannot assure investors that we will have funds available for these investments or that these enhancements and technologies will be successful. If a competing technology emerges that is, or is perceived to be, superior to our existing technology and we are unable to adapt to these changes and to compete effectively, our market share and financial condition could be materially and adversely affected, and our business, revenue, and results of operations could be harmed.

Changes in general economic conditions, together with other factors, cause significant upturns and downturns in the industry, and our business, therefore, may also experience cyclical fluctuations in the future.

From time to time, changes in general economic conditions, together with other factors, may cause significant upturns and downturns in the semiconductor industry. These fluctuations are due to a number of factors, many of which are beyond our control, including:

- levels of inventory in our end markets,
- availability and cost of supply for manufacturing of our RF filters using our design,
- changes in end-user demand for the products manufactured with our technology and sold by our prospective customers,
- industry production capacity levels and fluctuations in industry manufacturing yields,
- market acceptance of our future customers' products that incorporate our RF filters,
- the gain or loss of significant customers,
- the effects of competitive pricing pressures, including decreases in average selling prices of our RF filters,
- new product and technology introductions by competitors,
- changes in the mix of products produced and sold, and
- intellectual property disputes.

As a result, the demand for our products can change quickly and in ways we may not anticipate, and our business, therefore, may also experience cyclical fluctuations in future operating results. In addition, future downturns in the electronic systems industry could adversely impact our revenue and harm our business, financial condition and results of operations.

If we are unable to attract and retain qualified personnel to contribute to the development, manufacture and sale of our products, we may not be able to effectively operate our business.

As the source of our technological and product innovations, our key technical personnel represent a significant asset. We believe that our future success is highly dependent on the continued services of our current key officers, employees, and Board members, as well as our ability to attract and retain highly skilled and experienced technical personnel. The loss of their services could have a detrimental effect on our operations. Specifically, the loss of the services of Jeffrey Shealy, our President and Chief Executive Officer, John Kurtzweil, our Chief Financial Officer, David Aichele, our Vice President of Business Development, Andrew Wright, our General Counsel, any major change in our Board or management, or our inability to attract, retain and motivate qualified personnel could have a material adverse effect on our ability to operate our business. The competition for management and technical personnel is intense in the wireless semiconductor industry, and therefore, we cannot assure you that we will be able to attract and retain qualified management and other personnel necessary for the design, development, manufacture and sale of our products.

Product defects could adversely affect the results of our operations and may expose us to product liability claims.

The fabrication of RF filters is a complex and precise process. If we or any of our manufacturers fails to successfully manufacture wafers that conform to our design specifications and the strict regulatory requirements of the Federal Communications Commission ("FCC"), it may result in substantial risk of undetected flaws in components or other materials used by our manufacturers during fabrication of our filters and could lead to product defects and costs to repair or replace these parts or materials. Any such failure would significantly impact our ability to develop and implement our technology and to improve performance of our RF filters. Our inability to comply with such requirements could result in significant costs, as well as negative publicity and damage to our reputation that could reduce demand for our products.

We also could be subject to product liability lawsuits if the wireless devices containing our RF filters cause injury. Recently interest groups have requested that the FCC investigate claims that wireless communications technologies pose health concerns and cause interference with airbags, hearing aids and medical devices. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product or inadequate disclosure of risks related to the use of our product, negligence, strict liability and a breach of warranties. Claims could also be asserted under state consumer protection acts.

If we are unable to establish effective marketing and sales capabilities or enter into agreements with third parties to market and sell our RF filters, we may not be able to effectively generate product revenues.

We have limited experience selling, marketing or distributing products and currently have a small internal marketing and sales force. In order to launch and commercialize our technology and our RF filters, we must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. Therefore, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If so, our success will depend, in part, on our ability to enter into and maintain collaborative relationships for such capabilities, such collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products.

If we are unable to enter into such arrangements when needed on acceptable terms or at all, we may not be able to successfully commercialize our filters. Further, to the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. If we decide in the future to establish an internal sales and marketing team with technical expertise and supporting distribution capabilities to commercialize our RF filters, it could be expensive and time consuming and would require significant attention of our executive officers to manage. We may also not have sufficient resources to allocate to the sales and marketing of our filters. Any failure or delay in the development of sales, marketing and distribution capabilities, either through collaboration with one or more third parties or through internal efforts, would adversely impact the commercialization of any of our products that we obtain approval to market. As a result, our future product revenue would suffer and we may incur significant additional losses

Risks Related to Our Intellectual Property

If we fail to obtain, maintain and enforce our intellectual property rights, we may not be able to prevent third parties from using our proprietary technologies.

Our long-term success largely depends on our ability to market technologically competitive products which, in turn, largely depends on our ability to obtain and maintain adequate intellectual property protection and to enforce our proprietary rights without infringing the proprietary rights of third parties. While we rely upon a combination of our patent applications currently pending with the United State Patent and Trademark Office ("USPTO"), our trademarks, copyrights, trade secret protection and confidentiality agreements to protect the intellectual property related to our technologies, there can be no assurance that:

- our currently pending or future patent applications will result in issued patents,
- our limited patent portfolio will provide adequate protection to our core technology,
- we will succeed in protecting our technology adequately in all key jurisdictions, or
- we can prevent third parties from disclosure or misappropriation of our proprietary information which could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding any competitive advantage we may derive from the proprietary information.

We have a limited number of patent applications which may not result in issued patents or patents that fully protect our intellectual property.

In the United States and internationally we have twenty (20) pending patent applications; however, there is no assurance that any of the pending applications or our future patent applications will result in patents being issued, or that any patents that may be issued as a result of existing or future applications will provide meaningful protection or commercial advantage to us.

The process of seeking patent protection in the United States and abroad can be long and expensive. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain at the time of filing that we are the first to file any patent application related to our single-crystal acoustic wave filter technology. In addition, patent applications are often published as part of the patent application process, even if such applications do not issue as patents. When published, such applications will become publicly available, and proprietary information disclosed in the application will become available to others. While at present we are unaware of competing patent applications, competing applications could potentially surface.

Even if all of our pending patent applications are granted and result in registration of our patents, we cannot predict the breadth of claims that may be allowed or enforced, or that the scope of any patent rights could provide a sufficient degree of protection that could permit us to gain or keep our competitive advantage with respect to these products and technologies. For example, we cannot predict:

- the degree and range of protection any patents will afford us against competitors, including whether third parties will find ways to make, use, sell, offer to sell or import competitive products without infringing our patents,
- if and when patents will be issued,
- if third parties will obtain patents claiming inventions similar to those covered by our patents and patent applications,
- if third parties have blocking patents that could be used to prevent us from marketing our own patented products and practicing our own technology, or
- whether we will need to initiate litigation or administrative proceedings (e.g. at the USPTO) in connection with patent rights, which may be costly whether we win or lose.

As a result, the patent applications we own may fail to result in issued patents in the United States. Third parties may challenge the validity, enforceability or scope of any issued patents or patents issued to us in the future, which may result in those patents being narrowed, invalidated or held unenforceable. Even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from developing similar products that do not infringe the claims made in our patents. If the breadth or strength of protection provided by the patents we hold or pursue is threatened, we may not be able to prevent others from offering similar technology and products in the RFFE mobile market and our ability to commercialize our RF filters with technology protected by those patents could be threatened.

If we fail to obtain issued patents outside of the United States, our ability to prevent misappropriation of our proprietary information or infringement of our intellectual property rights in countries outside of the United States where our filters may be sold in the future may be significantly limited. If we file foreign patent applications related to our pending U.S. patent applications or to our issued patents in the United States, these applications may be contested and fail to result in issued patents outside of the United States or we may be required to narrow our claims. Even if some or all of our patent applications are granted outside of the United States and result in issued patents, effective enforcement of rights granted by these patents in some countries may not be available due to the differences in foreign patent and other laws concerning intellectual property rights, a relatively weak legal regime protecting intellectual property rights in these countries, and because it is difficult, expensive and time-consuming to police unauthorized use of our intellectual property when infringers are overseas. This failure to obtain or maintain adequate protection of our intellectual property rights outside of the United States could have a materially adverse effect on our business, results of operations and financial conditions.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents of our potential licensors. To attempt to stop infringement or unauthorized use, we may need to file infringement claims, which can be expensive and time consuming and distract management.

If we pursue any infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the relevant technology on the grounds that our patents do not cover the technology in question. Additionally, any enforcement of our patents may provoke third parties to assert counterclaims against us. Some of our current and potential competitors have the ability to dedicate substantially greater resources to enforcing their intellectual property rights than we have. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, which could reduce the likelihood of success of, or the amount of damages that could be awarded resulting from, any infringement proceeding we pursue in any such jurisdiction. An adverse result in any infringement litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put our patent applications at risk of not issuing, which could limit the ability of our filters to compete in those jurisdictions.

Interference proceedings could be provoked by third parties or brought by the USPTO to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to use it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms, or at all.

We need to protect our trademark rights and disclosure of our trade secrets to prevent competitors from taking advantage of our goodwill.

We believe that the protection of our trademark rights is an important factor in product recognition, protecting our brand, maintaining goodwill, and maintaining or increasing market share. We currently have two trademarks that we have filed to register with the USPTO — the Akoustis and BulkONE® marks — and we may expend substantial cost and effort in an attempt to register new trademarks and maintain and enforce our trademark rights. If we do not adequately protect our rights in our trademarks from infringement, any goodwill that we have developed in those trademarks could be lost or impaired.

Third parties may claim that the sale or promotion of our products, when and if we have any, may infringe on the trademark rights of others. Trademark infringement problems occur frequently in connection with the sale and marketing of products in the RFFE mobile industry. If we become involved in any dispute regarding our trademark rights, regardless of whether we prevail, we could be required to engage in costly, distracting and time-consuming litigation that could harm our business. If the trademarks we use are found to infringe upon the trademark of another company, we could be liable for damages and be forced to stop using those trademarks, and as result, we could lose all the goodwill that has been developed in those trademarks.

In addition to the protection afforded by patents and trademarks, we seek to rely on copyright, trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our processes that involve proprietary know-how, information or technology that is not covered by patents. For Akoustis, this includes chip layouts, circuit designs, resonator layouts and implementation, and membrane definition. Although we require all of our employees and certain consultants and advisors to assign inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, our trade secrets and other proprietary information may be disclosed or competitors may otherwise gain access to such information or independently develop substantially equivalent information. If we are unable to prevent material disclosure of the intellectual property related to our technologies to third parties, we will not be able to establish or maintain the competitive advantage that we believe is provided by such intellectual property, which would weaken our competitive market position, and materially adversely affect our business and operational results.

Development of certain technologies with our manufacturers may result in restrictions on jointly-developed intellectual property.

In order to maintain and expand our strategic relationship with manufacturers of our filters, we may, from time to time, develop certain technologies jointly with these manufacturers and file for further intellectual property protection and/or seek to commercialize such technologies. We may enter into joint development agreements with manufacturers to provide for joint development works and joint intellectual property rights by us and by such manufacturer. Such agreements may restrict our commercial use of such intellectual property, or may require written consent from, or a separate agreement with, that manufacturer. In other cases, we may not have any rights to use intellectual property solely developed and owned by such manufacturer or another third party. If we cannot obtain commercial use rights for such jointly-owned intellectual property or intellectual property solely owned by these manufacturers, our future product development and commercialization plans may be adversely affected.

We may be subject to claims of infringement, misappropriation or misuse of third party intellectual property that, regardless of merit, could result in significant expense and loss of our intellectual property rights.

The semiconductor industry is characterized by the vigorous pursuit and protection of intellectual property rights. We have not undertaken a comprehensive review of the rights of third parties in our field. From time to time, we may receive notices or inquiries from third parties regarding our products or the manner in which we conduct our business suggesting that we may be infringing, misappropriating or otherwise misusing patent, copyright, trademark, trade secret and other intellectual property rights. Any claims that our technology infringes, misappropriates or otherwise misuses the rights of third parties, regardless of their merit or resolution, could be expensive to litigate or settle and could divert the efforts and attention of our management and technical personnel, cause significant delays and materially disrupt the conduct of our business. We may not prevail in such proceedings given the complex technical issues and inherent uncertainties in intellectual property litigation. If such proceedings result in an adverse outcome, we could be required to:

- pay substantial damages, including treble damages if we were held to have willfully infringed,
- cease the manufacture, offering for sale or sale of the infringing technology or processes,
- expend significant resources to develop non-infringing technology or processes,
- obtain a license from a third party, which may not be available on commercially reasonable terms, or may not be available at all, or
- lose the opportunity to license our technology to others or to collect royalty payments based upon successful protection and assertion of our intellectual property against others.

In addition, our agreements with prospective customers and manufacturing partners may require us to indemnify such customers and manufacturing partners for third party intellectual property infringement claims. Pursuant to such agreements, we may be required to defend such customers and manufacturing partners against certain claims that could cause us to incur additional costs. While we endeavor to include as part of such indemnification obligations a provision permitting us to assume the defense of any indemnification claim, not all of our current agreements contain such a provision and we cannot provide any assurance that our future agreements will contain such a provision, which could result in increased exposure to us in the case of an indemnification claim.

Defense of any intellectual property infringement claims against us, regardless of their merit, would involve substantial litigation expense and would be a significant diversion of resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, obtain one or more licenses from third parties, limit our business to avoid the infringing activities, pay royalties and/or redesign our infringing technology or alter related formulations, processes, methods or other technologies, any or all of which may be impossible or require substantial time and monetary expenditure. The occurrence of any of the above events could prevent us from continuing to develop and commercialize our filters and our business could materially suffer.

Risks Related to our Financial Condition

We have a history of losses, will need substantial additional funding to continue our operations and may not achieve or sustain profitability in the future.

Our operations have consumed substantial amounts of cash since inception. We have incurred losses since our incorporation and formation in 2014. Although our newly acquired STC-MEMS Business has a potential revenue stream estimation of \$1.5 million in the current fiscal year, (which are not guaranteed), and although we plan to apply for additional grants in the calendar year 2018, we do not expect meaningful revenues from our resonator technology until at least the second half of the calendar year 2018. There is no guarantee that the grants we apply for will be awarded to us, and if our forecasts for the Company prove incorrect, the business, operating results and financial condition of the Company will be materially and adversely affected. We anticipate that our operating expenses will increase in the foreseeable future as we continue to pursue the development of our patent-pending single-crystal acoustic wave filter technology, invest in marketing, sales and distribution of our RF filters to grow our business, acquire customers, commercialize our technology in the mobile wireless market and continue the transition of our manufacturing to our STC-MEMS Business. These efforts may prove more expensive than we currently anticipate, and we may not succeed in generating sufficient revenues to offset these higher expenses. In addition, we expect to incur significant expenses related to regulatory requirements and our ability to obtain, protect, and defend our intellectual property rights.

We may also encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may increase our capital needs and/or cause us to spend our cash resources faster than we expect. Accordingly, we will need to obtain substantial additional funding in order to continue our operations.

To date, we have financed our operations through a mix of investments from private investors, the incurrence of debt, and grant funding, and we expect to continue to utilize such means of financing for the foreseeable future. Additional funding from those or other sources may not be available when or in the amounts needed, on acceptable terms, or at all. If we raise capital through the sale of equity, or securities convertible into equity, it would result in dilution to our then existing stockholders, which could be significant depending on the price at which we may be able to sell our securities. If we raise additional capital through the incurrence of indebtedness, we would likely become subject to covenants restricting our business activities, and holders of debt instruments may have rights and privileges senior to those of our equity investors. In addition, servicing the interest and principal repayment obligations under debt facilities could divert funds that would otherwise be available to support research and development, or commercialization activities. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our R&D programs for our acoustic wave filter technology or any future commercialization efforts. Any of these events could materially and adversely affect our business, financial condition and prospects, and could cause our business to fail.

Our independent registered public accounting firm has expressed doubt about our ability to continue as a going concern.

The Company's historical financial statements have been prepared under the assumption that we will continue as a going concern. Our independent registered public accounting firm has issued a report that included an explanatory paragraph referring to our recurring net losses and accumulated deficit and expressing substantial doubt in our ability to continue as a going concern. Our ability to continue as a going concern is dependent upon our ability to obtain additional equity financing or other capital, attain further operating efficiencies, reduce expenditures, and, ultimately, to generate revenue. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

The Company's management has also evaluated whether there are conditions and events that raise substantial doubt about the entity's ability to continue as a going concern. As a result of that assessment, the Company has determined that if adequate funds are not available to us when we need them either through capital or debt or through the commercialization of our products, those conditions would indicate substantial doubt about our ability to continue as a going concern.

Risk Related to Managing Any Growth We May Experience

We may engage in future acquisitions that could disrupt our business, cause dilution to our stockholders and harm our financial condition and operating results.

While we currently have no specific plans to acquire any other businesses, we may, in the future, make acquisitions of, or investments in, companies that we believe have products or capabilities that are a strategic or commercial fit with our current business or otherwise offer opportunities for our company. In connection with these acquisitions or investments, we may:

- issue Common Stock or other forms of equity that would dilute our existing stockholders' percentage of ownership,

- incur debt and assume liabilities, and
- incur amortization expenses related to intangible assets or incur large and immediate write-offs.

We may not be able to complete acquisitions on favorable terms, if at all. If we do complete an acquisition, we cannot assure you that it will ultimately strengthen our competitive position or that it will be viewed positively by customers, financial markets or investors. Furthermore, future acquisitions could pose numerous additional risks to our expected operations, including:

- problems integrating the purchased business, products or technologies,
- challenges in achieving strategic objectives, cost savings and other anticipated benefits,
- increases to our expenses,
- the assumption of significant liabilities that exceed the limitations of any applicable indemnification provisions or the financial resources of any indemnifying party,
- inability to maintain relationships with prospective key customers, vendors and other business partners of the acquired businesses,
- diversion of management's attention from their day-to-day responsibilities,
- difficulty in maintaining controls, procedures and policies during the transition and integration,
- entrance into marketplaces where we have no or limited prior experience and where competitors have stronger marketplace positions,
- potential loss of key employees, particularly those of the acquired entity, and
- historical financial information may not be representative or indicative of our results as a combined company.

Our business and operations would suffer in the event of system failures, and our operations are vulnerable to interruption by natural disasters, terrorist activity, power loss and other events beyond our control, the occurrence of which could materially harm our business.

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access as well as telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our R&D. If any disruption or security breach resulted in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and/or the further development of our technology for RF filters could be delayed.

We are also vulnerable to accidents, electrical blackouts, labor strikes, terrorist activities, war and other natural disasters and other events beyond our control, and we have not undertaken a systematic analysis of the potential consequences to our business as a result of any such events and do not have an applicable recovery plan in place. We currently do not carry other business interruption insurance that would compensate us for actual losses from interruptions of our business that may occur, and any losses or damages incurred by us could cause our business to materially suffer.

Risks Related to Regulatory Requirements

We could fail to maintain our Trusted Foundry accreditation in our New York Fabrication Facility.

Although our New York fabrication facility has not generated any revenue to date from its Trusted Foundry accreditation, a failure to maintain that accreditation in the future could hamper our ability to generate product and foundry services revenue related to potential Aerospace and Defense customers.

We may incur substantial expenses in connection with regulatory requirements, and any regulatory compliance failure could cause our business to suffer.

The wireless communications industry is subject to ongoing regulatory obligations and review. See “Description of Business — Government Regulations” below. Maintaining compliance with these requirements may result in significant additional expense to us, and any failure to maintain such compliance could cause our business to suffer.

Noncompliance with applicable regulations or requirements could also subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, or injunctions. An adverse outcome in any such litigation could require us to pay contractual damages, compensatory damages, punitive damages, attorneys’ fees and costs. These enforcement actions could harm our business, financial condition and results of operations. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition and results of operations could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in professional fees.

Compliance with regulations regarding the use of “conflict minerals” could limit the supply and increase the cost of certain metals used in manufacturing our products.

Regulations in the United States require that we determine whether certain materials used in our products, referred to as conflict minerals, originated in the Democratic Republic of the Congo or adjoining countries, or originated from recycled or scrap sources. We are required to comply with the SEC’s conflict minerals rules, and we may incur costs associated with implementing and maintaining policies and procedures to comply with the applicable rules and due diligence procedures. In addition, the verification and reporting requirements could affect the sourcing and availability of minerals that are used in the manufacture of our products, and we may face reputational and competitive challenges if we are unable to sufficiently verify the origins of all conflict minerals used in our products. We may also face challenges with government regulators, potential customers, suppliers and manufacturers if we are unable to sufficiently verify that the metals used in our products are conflict free.

There could be an adverse change or increase in the laws and/or regulations governing our business.

We and our operating subsidiary are subject to various laws and regulations in different jurisdictions, and the interpretation and enforcement of laws and regulations are subject to change. We also will be subject to different tax regulations in each of the jurisdictions where we will conduct our business or where our management or the management of our operating subsidiary is located. We expect that the scope and extent of regulation in these jurisdictions, as well as regulatory oversight and supervision, will generally continue to increase. There can be no assurance that future regulatory, judicial and legislative changes in any jurisdiction will not have a material adverse effect on us or hinder us in the operation of our business. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations applicable to us.

These current or future laws and regulations may impair our research, development or production efforts or impact the research activities we pursue. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions, which could cause our financial condition to suffer.

Investment Risks

You could lose all of your investment.

An investment in our securities is speculative and involves a high degree of risk. Potential investors should be aware that the value of an investment in the Company may go down as well as up. In addition, there can be no certainty that the market value of an investment in the Company will fully reflect its underlying value. You could lose your entire investment.

Our stock trades in low volumes, which may make it more difficult for investors to sell their shares quickly.

Our Common Stock trades on the Nasdaq Capital Market, but it trades in low volumes, which may make it more difficult for investors to sell their shares quickly. This situation may be attributable to a number of factors, including but not limited to the fact that we are a development-stage company that is relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investor community. In addition, investors may be risk averse to investments in development-stage companies. As a consequence, it may be more difficult for investors to sell their shares quickly and our stock price may be more sensitive to sales of our Common Stock in the market. The low trading volume is outside of our control and may not increase or, if it increases, may not be maintained.

You may experience dilution of your ownership interests because of the future issuance of additional shares of our common or preferred stock or other securities that are convertible into or exercisable for our common or preferred stock, including as a result of triggering price protection rights held by certain investors.

In the future, we may issue our authorized but previously unissued equity securities, resulting in the dilution of the ownership interests of our stockholders. The Company is authorized to issue an aggregate of 45,000,000 shares of Common Stock and 5,000,000 shares of preferred stock. We may issue additional shares of our Common Stock or other securities that are convertible into or exercisable for our Common Stock in connection with hiring or retaining employees, future acquisitions, future sales of our securities for capital raising purposes, or for other business purposes. For example, we issued approximately 5.4 million shares in private placement offerings and approximately 1.6 million shares to new and continuing employees in calendar 2017, and we expect to hire an additional 15 to 20 employees in the next 12 months. In addition, as of January 10, 2018, warrants and options to purchase 756,809 and 1,166,859 shares, respectively, of our Common Stock remained outstanding or had otherwise been granted to participants in the Company's stock incentive plans, and restricted shares and restricted stock units for 771,494 shares of our Common Stock had been granted to participants in the Company's stock incentive plans. In addition, certain investors have certain price protection rights. Pursuant to such rights, if we issue shares of our Common Stock (subject to customary exceptions, including issuances of awards under Company employee stock incentive programs and certain issuances in connection with credit arrangements) at a price less than \$5.50 per share, such investors will be entitled to receive (for no additional consideration) additional shares of our Common Stock in an amount such that, when added to the number of shares of Common Stock they initially purchased, will equal the number of shares of Common Stock that their initial investment would have purchased at the greater of the lower purchase price and \$5.00. The future issuance of additional shares of our Common Stock may create downward pressure on the trading price of the Common Stock. We will need to raise additional capital in the near future to meet our working capital needs, and there can be no assurance that we will not be required to issue additional shares, warrants or other convertible securities in the future in conjunction with these capital raising efforts, including at a price (or exercise prices) below the price you paid for your stock.

The ability of our Board of Directors to issue additional stock may prevent or make more difficult certain transactions, including a sale or merger of the Company.

Our Board of Directors is authorized to issue up to 5,000,000 shares of preferred stock with powers, rights and preferences designated by it. Shares of voting or convertible preferred stock could be issued, or rights to purchase such shares could be issued, to create voting impediments or to frustrate persons seeking to effect a takeover or otherwise gain control of the Company. The ability of the Board to issue such additional shares of preferred stock, with rights and preferences it deems advisable, could discourage an attempt by a party to acquire control of the Company by tender offer or other means. Such issuances could therefore deprive stockholders of benefits that could result from such an attempt, such as the realization of a premium over the market price for their shares in a tender offer or the temporary increase in market price that such an attempt could cause. Moreover, the issuance of such additional shares of preferred stock to persons friendly to the Board of Directors could make it more difficult to remove incumbent managers and directors from office even if such change were to be favorable to stockholders generally.

We do not anticipate paying dividends on our Common Stock.

Cash dividends have never been declared or paid on our Common Stock, and we do not anticipate such a declaration or payment for the foreseeable future. We expect to use future earnings, if any, to fund business growth. Therefore, stockholders will not receive any funds absent a sale of their shares of Common Stock. If we do not pay dividends, our Common Stock may be less valuable because a return on your investment will only occur if our stock price appreciates. We cannot assure stockholders that our stock price will appreciate or that they will receive a positive return on their investment if and when they sell their shares.

We are an emerging growth company, and the reduced disclosure requirements applicable to emerging growth companies will make our Common Stock less attractive to investors.

We are an emerging growth company under the JOBS Act. For as long as we continue to be an emerging growth company, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory stockholder vote on executive compensation (“say-on-pay”), the frequency of say-on-pay and any golden parachute payments not previously approved, exemption from the requirement of auditor attestation in the assessment of our internal control over financial reporting and exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board. If we do, the information that we provide stockholders may be different than what is available with respect to other public companies. We cannot predict if investors will find our Common Stock less attractive because we will rely on these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected to take advantage of this extended transition period. Since we will not be required to comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies, our financial statements may not be comparable to the financial statements of companies that comply with the effective dates of those accounting standards.

We will remain an emerging growth company until the earliest of (1) the end of the fiscal year in which the market value of our Common Stock that is held by non-affiliates exceeds \$700 million as of the end of the second fiscal quarter, (2) the end of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more during such fiscal year, (3) the date on which we issue more than \$1 billion in non-convertible debt in a three-year period or (4) June 30, 2019, the end of the fiscal year following the fifth anniversary of the date of the first sale of our Common Stock pursuant to an effective registration statement filed under the Securities Act of 1933, as amended (the “Securities Act”). Decreased disclosures in our SEC filings due to our status as an “emerging growth company” may make it harder for investors to analyze our results of operations and financial prospects.

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

Being a public company is expensive and administratively burdensome.

As a public reporting company, we are subject to the information and reporting requirements of the Exchange Act, and other federal securities laws, rules and regulations related thereto, including compliance with the Sarbanes-Oxley Act. Complying with these laws and regulations requires the time and attention of our Board of Directors and management, and increases our expenses. Among other things, we are required to:

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

The costs of preparing and filing annual and quarterly reports, proxy statements and other information with the SEC and furnishing audited reports to stockholders is expensive and much greater than that of a privately-held company, and compliance with these rules and regulations may require us to hire additional financial reporting, internal controls and other finance personnel, and will involve a material increase in regulatory, legal and accounting expenses and the attention of management. There can be no assurance that we will be able to comply with the applicable regulations in a timely manner, if at all. In addition, being a public company makes it more expensive for us to obtain director and officer liability insurance. In the future, we may be required to accept reduced coverage or incur substantially higher costs to obtain this coverage. These factors could also make it more difficult for us to attract and retain qualified executives and members of our Board of Directors, particularly directors willing to serve on the Audit Committee of our Board of Directors.

If we fail to remediate the identified material weaknesses and maintain effective controls and procedures, we may not be able to accurately report our financial results, which could have a material adverse effect on our operations, financial condition, and the price of our Common Stock.

We are required to maintain disclosure controls and procedures and internal control over financial reporting. Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include in our annual reports on Form 10-K an assessment by management of the effectiveness of our internal control over financial reporting. As disclosed in Item 9A of our Annual Report on Form 10-K for the fiscal year ended June 30, 2017, our management identified a material weakness in our internal control over financial reporting, causing our disclosure controls and procedures and our internal control over financial reporting to be ineffective as of June 30, 2017, and as further disclosed in Part I, Item 4 of our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2017, our management identified a material weakness in the design of our internal controls related to our accounting for and reporting of stock-based compensation. A material weakness is a deficiency, or combination of deficiencies, 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. Remediation of the material weakness will require management attention and cause the Company to incur additional expenses. If we fail to remediate the material weakness, or if we are unable to maintain effective controls and procedures in the future, our ability to record, process, summarize, and report financial information accurately and within the time periods specified in the rules and forms of the SEC could be adversely affected, we could lose investor confidence in the accuracy and completeness of our financial reports, and we may be subject to investigation or sanctions by the SEC. Any such consequence or other negative effect could adversely affect our operations, financial condition, and the price of our Common Stock.

In addition, at such time, if any, as we are no longer a smaller reporting company or an emerging growth company, our independent registered public accounting firm will have to attest to and report on management's assessment of the effectiveness of our internal control over financial reporting. If and when we are required to have our independent registered public accounting firm attest to management's assessment of the effectiveness of our internal control over financial reporting, if our independent registered public accounting firm is not satisfied with the adequacy of our internal control over financial reporting, or if the independent auditors interpret the requirements, rules, or regulations differently than we do, then they may decline to attest to management's assessment or may issue a report that is qualified. Any of these events could result in a loss of investor confidence in the reliability of our financial statements, which could negatively affect the price of our Common Stock.

DETERMINATION OF OFFERING PRICE

There currently is a limited public market for our Common Stock. The selling stockholders will determine at what price they may sell the offered shares, and such sales may be made at prevailing market prices or at privately negotiated prices. See “Plan of Distribution” below for more information.

USE OF PROCEEDS

The shares of Common Stock offered hereby are being registered for the account of the selling stockholders named in this prospectus. As a result, all proceeds from the sales of the Common Stock will go to the selling stockholders and we will not receive any proceeds from the resale of the Common Stock by the selling stockholders.

However, we will receive proceeds from the exercise of the stock options already granted under the Plans if and to the extent that any such options are exercised by the selling stockholders. We would expect to use these proceeds, if any, for general working capital purposes.

DESCRIPTION OF SECURITIES

We have authorized capital stock consisting of 45,000,000 shares of Common Stock and 5,000,000 shares of preferred stock. As of the date of this prospectus, we had 22,320,700 shares of Common Stock issued and outstanding, and no shares of preferred stock issued and outstanding.

Common Stock

The holders of outstanding shares of Common Stock are entitled to receive dividends out of assets or funds legally available for the payment of dividends at such times and in such amounts as the board from time to time may determine. Holders of Common Stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders. There is no cumulative voting of the election of directors then standing for election. The Common Stock is not entitled to pre-emptive rights and is not subject to conversion or redemption. Upon liquidation, dissolution or winding up of our company, the assets legally available for distribution to stockholders are distributable ratably among the holders of the Common Stock after payment of liquidation preferences, if any, on any outstanding payment of other claims of creditors. Each outstanding share of Common Stock is duly and validly issued, fully paid and non-assessable.

Preferred Stock

Shares of preferred stock may be issued from time to time in one or more series, each of which will have such distinctive designation or title as shall be determined by our Board of Directors prior to the issuance of any shares thereof. Preferred stock will have such voting powers, whole or limited, or no voting powers, and such preferences and relative, participating, optional or other special rights and such qualifications, limitations or restrictions thereof, as shall be stated in such resolution or resolutions providing for the issue of such class or series of preferred stock as may be adopted from time to time by the Board of Directors prior to the issuance of any shares thereof. The number of authorized shares of preferred stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the voting power of all the then outstanding shares of our capital stock entitled to vote generally in the election of the directors, voting together as a single class, without a separate vote of the holders of the preferred stock, or any series thereof, unless a vote of any such holders is required pursuant to any preferred stock designation.

While we do not currently have any plans for the issuance of additional preferred stock, the issuance of such preferred stock could adversely affect the rights of the holders of Common Stock and, therefore, reduce the value of the Common Stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of the Common Stock until the Board of Directors determines the specific rights of the holders of the preferred stock; however, these effects may include:

- Restricting dividends on the Common Stock;
- Diluting the voting power of the Common Stock;
- Impairing the liquidation rights of the Common Stock; or
- Delaying or preventing a change in control of the Company without further action by the stockholders.

Other than in connection with shares of preferred stock (as explained above), which preferred stock is not currently designated nor contemplated by us, we do not believe that any provision of our charter or By-Laws would delay, defer or prevent a change in control.

Transfer Agent

The transfer agent for our Common Stock is Globex Transfer, LLC. The transfer agent's address is 780 Deltona Blvd., Suite 202, Deltona, FL 32725 and its telephone number is 813-344-4490.

Anti-Takeover Effects of Provisions of Our Certificate of Incorporation and By-Laws and Delaware State Law

The provisions of the General Corporation Law of the State of Delaware, or DGCL, and our Certificate of Incorporation and By-Laws could have the effect of discouraging others from attempting an unsolicited offer to acquire our company. Such provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Authorized but unissued shares. The authorized but unissued shares of our Common Stock and our preferred stock are available for future issuance without any further vote or action by our stockholders. These additional shares may be utilized for a variety of corporate purposes, including future public or private offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of our Common Stock and our preferred stock could render more difficult or discourage an attempt to obtain control over us by means of a proxy contest, tender offer, merger or otherwise.

Special meeting of stockholders and advance notice requirements for stockholder proposals. Our By-Laws require that special meetings of stockholders be called only by a majority of our board of directors, by the chairman of the board, the Chief Executive Officer, the President, or the Secretary. In addition, our By-Laws provide that candidates for director may be nominated and other business brought before an annual meeting only by the board of directors or by a stockholder who gives written notice to us not less than 90 days, nor more than 120 days, prior to the one year anniversary of the date of the annual meeting of the previous year. These provisions may have the effect of deterring unsolicited offers to acquire our company or delaying stockholder actions, even if they are favored by the holders of a majority of our outstanding voting securities.

Business combinations. The DGCL generally prohibits a corporation from engaging in any business combination with any interested stockholder for a three-year period following the time that the stockholder became an interested stockholder, unless:

- prior to such time, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding certain shares; or
- at or subsequent to that time, the business combination is approved by our board of directors and by the affirmative vote of holders of at least 66 $\frac{2}{3}$ % of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a “business combination” includes a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an “interested stockholder” is a person who, together with that person’s affiliates and associates, owns, or within the previous three years owned, 15% or more of our voting stock.

Under certain circumstances, this provision could make it more difficult for a person who would be an “interested stockholder” to effect various business combinations with a corporation for a three-year period. However, this provision generally does not apply to a corporation that does not have a class of voting stock that is listed on a national securities exchange or held of record by more than 2,000 stockholders. Accordingly, this provision does not currently apply to us.

SELLING STOCKHOLDERS

The table below sets forth information concerning the resale of the shares by the selling stockholders. We will not receive any proceeds from the resale of the shares by the selling stockholders.

The table below sets forth, as of January 29, 2018, (i) the name of each person who is offering the resale of shares by this prospectus and their position with us; (ii) the number of shares (and the percentage, if 1% or more) of Common Stock beneficially owned (as such term is defined in Rule 13d-3 under the Exchange Act) by each person; (iii) the number of shares that each selling stockholder may offer for sale from time to time pursuant to this prospectus, whether or not such selling stockholder has a present intention to do so; and (iv) the number of shares (and the percentage, if 1% or more) of Common Stock each person will own after the offering, assuming they sell all of the shares offered. Unless otherwise indicated, beneficial ownership is direct and the person indicated has sole voting and investment power. Unless otherwise indicated, the address for each selling stockholder listed in the table below is c/o Akoustis Technologies, Inc., 9805 Northcross Center Court, Suite A, Huntersville, NC 28078.

The table below has been prepared based upon the information furnished to us by the selling stockholders as of January 29, 2018, and we have not independently verified this information. The selling stockholders identified below may have sold, transferred or otherwise disposed of some or all of their shares since the date on which the information in the following table is presented in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling stockholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly. We cannot give an estimate as to the number of shares of Common Stock that will actually be held by the selling stockholders upon termination of this offering because the selling stockholders may offer some or all of their Common Stock under the offering contemplated by this prospectus or acquire additional shares of Common Stock. The total number of shares that may be sold hereunder will not exceed the number of shares offered hereby. Please read the section entitled “Plan of Distribution” in this prospectus.

Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering (1)	Percentage of Common Stock Beneficially Owned Before Resale (3)	Shares of Common Stock Offered for Resale in this Offering	Shares of Common Stock Beneficially Owned After this Offering (2)	Percentage of Common Stock Beneficially Owned After Resale (3)
Alan Kathman (4)	24,307	*	24,307	—	*
Alexander Feldman	12,089	*	12,089	—	*
Andrey Grinman (5)	8,103	*	8,103	—	*
Arthur Geiss (6)	80,125	*	86,307	13,818	*
Cindy Payne (7)	66,375	*	57,000	9,375	*
Dave Aichele (8)	126,784	*	122,534	4,250	*
David Keller (9)	16,205	*	16,205	—	*
Hannah Stalvey (10)	10,667	*	10,667	—	*
Isik Kizilyalli (11)	79,817	*	64,817	15,000	*
James R. Shealy (12)	447,082	2.0%	71,816	375,266	1.7%
Jeff McMahon (13)	557,342	2.5%	62,000	515,342	2.3%
Jeffrey Shealy (14)	3,275,862	14.7%	36,000	3,239,862	14.5%
Jerry Neal (15)	521,545	2.3%	62,000	479,545	2.1%
Lora Shealy (16)	4,000	*	4,000	—	*
Mark Boomgarden (17)	111,084	*	108,934	2,150	*
Michael David Hodge, II (18)	46,000	*	46,000	—	*
Michael P. Lewis (19)	34,234	*	34,234	—	*
Mike McLain (20)	27,000	*	27,000	—	*
Ozgur Aktas (21)	16,205	*	16,205	—	*
Pinal Patel (22)	29,957	*	29,957	—	*
Ramakrishna Vetury (23)	65,000	*	65,000	—	*
Richard J. Brown (24)	32,307	*	32,307	—	*
Richard T. Ogawa (25)	155,837	*	64,817	91,020	*
Shawn Gibb (26)	76,520	*	76,520	—	*
Steve P. Denbaars (27)	291,312	1.3%	126,817	184,495	*
Westbrook Hosse (28)	20,000	*	20,000	—	*
Total			1,285,636		

*Less than 1%

(1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of Common Stock underlying options currently exercisable, or exercisable within 60 days after January 29, 2018 (as used in this section, the “Determination Date”), are deemed outstanding for purposes of computing the beneficial ownership of the person holding such options but are not deemed outstanding for computing the beneficial ownership of any other person. Except where we had knowledge of such ownership, the number presented in this column may not include shares held in street name or through other entities over which the selling stockholder has voting and dispositive power.

(2) Assumes all of the shares of Common Stock to be registered on the registration statement of which this prospectus is a part are sold in the offering, that shares of Common Stock beneficially owned by such selling stockholder but not being offered pursuant to this prospectus (if any) are not sold, and that no additional shares are purchased or otherwise acquired.

(3) Percentages are based on the 22,320,700 shares of Common Stock issued and outstanding as of the Determination Date. Shares of our Common Stock subject to options that are currently exercisable, or exercisable within 60 days of the Determination Date, are deemed to be outstanding for the purpose of computing the percentage ownership of the person holding those options, but are not treated as outstanding for the purpose of computing the percentage ownership of any other person.

- (4) Includes 6,914 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (5) Includes 7,698 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (6) Mr. Geiss is Co-Chairman of the Company's Board of Directors and provides consulting services to the Company through his company, AEG Consulting, LLC ("AEG Consulting"). Includes 28,256 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time. Includes 20,000 shares of Common Stock issuable upon the exercise of vested options that are exercisable until May 22, 2025.
- (7) Ms. Payne served as the Company's Chief Financial Officer until July 14, 2017 when she voluntarily resigned and transitioned into the position of Vice President of Finance. Ms. Payne resigned from all positions she held with the Company, effective January 12, 2018.
- (8) Mr. Aichele is the Company's Vice President of Business Development. Includes 75,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (9) Includes 16,205 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (10) Includes 8,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (11) Includes 16,205 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (12) James R. Shealy is the brother of the Company's President and Chief Executive Officer and has provided consulting services to the Company. Includes 23,205 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (13) Mr. McMahon is a director of the Company. Includes 22,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time. Includes 20,000 shares of Common Stock issuable upon the exercise of vested options that are exercisable until May 22, 2025.
- (14) Jeffrey Shealy is the President, Chief Executive Officer and a director of the Company. Includes 36,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (15) Mr. Neal is Co-Chairman of the Company's Board of Director. Includes 22,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time. Includes 20,000 shares of Common Stock issuable upon the exercise of vested options that are exercisable until May 22, 2025.
- (16) Mrs. Shealy is the Company's Human Resources Manager and the spouse of the Company's President and Chief Executive Officer. Includes 4,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (17) Mr. Boomgarden served as the Company's Vice President of Operations until his resignation, effective September 15, 2017.
- (18) Includes 32,500 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (19) Includes 22,799 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (20) Includes 27,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (21) Includes 15,395 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (22) Includes 15,104 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (23) Includes 65,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (24) Includes 14,077 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (25) Includes 16,204 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.
- (26) Includes 51,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.

- (27) Mr. DenBaars is a director of the Company and has held such position since May 22, 2015. Prior to becoming a director, Mr. DenBaars provided consulting services to Akoustis, Inc. Includes 38,205 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time. Includes 20,000 shares of Common Stock issuable upon the exercise of vested options that are exercisable until May 22, 2025.
- (28) Includes 20,000 restricted shares that are subject to a repurchase option by the Company. The repurchase option expires as the restricted shares vest over time.

PLAN OF DISTRIBUTION

The shares of Common Stock covered by this reoffer prospectus are being registered by Akoustis for the account of the selling stockholders. The shares of Common Stock offered may be sold from time to time directly by or on behalf of each selling stockholder in one or more transactions on the NASDAQ Capital Market or any other stock exchange on which the Common Stock may be listed at the time of sale, in privately negotiated transactions, or through a combination of such methods, at market prices prevailing at the time of sale, at prices related to such prevailing market prices, at fixed prices (which may be changed) or at negotiated prices. The selling stockholders may sell shares through one or more agents, brokers or dealers or directly to purchasers. Such brokers or dealers may receive compensation in the form of commissions, discounts or concessions from the selling stockholders and/or purchasers of the shares or both. Such compensation as to a particular broker or dealer may be in excess of customary commissions. The number of shares of Common Stock to be offered or resold by means of this prospectus by each selling stockholder may not exceed, during any three-month period, the amount specified in Rule 144(e) under the Securities Act.

In connection with their sales, a selling stockholder and any participating broker or dealer may be deemed to be “underwriters” within the meaning of the Securities Act, and any commissions they receive and the proceeds of any sale of shares may be deemed to be underwriting discounts and commissions under the Securities Act. We are bearing all costs relating to the registration of the shares of Common Stock. Any commissions or other fees payable to brokers or dealers in connection with any sale of the shares will be borne by the selling stockholders or other party selling such shares. Sales of the shares must be made by the selling stockholders in compliance with all applicable state and federal securities laws and regulations, including the Securities Act. In addition to any shares sold hereunder, selling stockholders may sell shares of Common Stock in compliance with Rule 144. There is no assurance that the selling stockholders will sell all or a portion of the Common Stock offered hereby. The selling stockholders may agree to indemnify any broker, dealer or agent that participates in transactions involving sales of the shares against certain liabilities in connection with the offering of the shares arising under the Securities Act. We have notified the selling stockholders of the need to deliver a copy of this reoffer prospectus in connection with any sale of the shares.

The anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of our Common Stock and activities of the selling stockholders, which may limit the timing of purchases and sales of any of the shares of Common Stock by the selling stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Common Stock to engage in passive market-making activities with respect to the shares of Common Stock. Passive market making involves transactions in which a market maker acts as both our underwriter and as a purchaser of our Common Stock in the secondary market. All of the foregoing may affect the marketability of the shares of Common Stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Common Stock.

Once sold under the registration statement of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the shares of Common Stock offered pursuant to this prospectus will be passed upon for us by Womble Bond Dickinson (US) LLP, Washington, DC.

EXPERTS

The consolidated financial statements of Akoustis Technologies, Inc. and Subsidiaries as of June 30, 2017 and 2016 and for the years then ended, included in this prospectus and the registration statement of which this prospectus forms a part by reference from the Company’s Annual Report on Form 10-K for the year ended June 30, 2017, have been audited by Marcum LLP, independent registered public accounting firm, as set forth in its report thereon (which contains an explanatory paragraph relating to substantial doubt about the ability of Akoustis Technologies, Inc. to continue as a going concern as described in Note 2 to the consolidated financial statements), which are incorporated herein by reference, have been so incorporated in reliance on such report given upon such firm’s authority as an expert in auditing and accounting.

The special purpose combined financial statements of The Research Foundation for the State University of New York and Fuller Road Management Corporation, which comprise the special purpose statement of assets acquired and liabilities assumed as of June 26, 2017, and the related special purpose combined statements of revenues and direct expenses for the years ended June 30, 2016 and 2015, included in this prospectus and the registration statement of which this prospectus forms a part by reference from the Company's Current Reports on Form 8-K/A filed with the SEC on September 12, 2017, have been audited by Marcum LLP, independent registered public accounting firm, as set forth in its report thereon, which are incorporated herein by reference, have been so incorporated in reliance on such report given upon such firm's authority as an expert in auditing and accounting.

MATERIAL CHANGES

There have been no material changes in our affairs since the end of our last fiscal year on June 30, 2017 to the date of this prospectus, other than those changes that have been described in our Quarterly Report on Form 10-Q that we filed with the SEC on November 14, 2017 and the Current Reports on Form 8-K and 8-K/A, as applicable, that we filed with the SEC on June 30, 2017, July 17, 2017, July 18, 2017, July 20, 2017, September 6, 2017, September 12, 2017, September 29, 2017, October 6, 2017, November 17, 2017, December 7, 2017, December 15, 2017, December 21, 2017, and January 10, 2018.

WHERE YOU CAN FIND MORE INFORMATION

We file annual reports, quarterly reports, current reports and other information with the SEC. You may read or obtain a copy of these reports at our website address, www.akoustis.com, or at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room and their copy charges by calling the SEC at 1-800-SEC-0330. The SEC maintains a website that contains registration statements, reports, proxy information statements and other information regarding registrants that file electronically with the SEC. The address of the website is <http://www.sec.gov>.

We have filed with the SEC a Registration Statement on Form S-8 under the Securities Act to register the shares offered by this prospectus. This prospectus is part of that registration statement and constitutes a prospectus of the Company. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference certain of our publicly filed documents into this prospectus, which means that we can disclose important business and financial information to you that is not included in or delivered with this prospectus by referring you to publicly filed documents that contain the omitted information. The information incorporated by reference is considered to be part of this prospectus, and any later information that we file with the SEC will automatically update and supersede this information. You will be deemed to have notice of all information incorporated by reference into this prospectus as if that information were included in this prospectus.

We incorporate by reference into this prospectus the following documents or information filed with the SEC:

- Annual Report on Form 10-K for the year ended June 30, 2017 filed with the SEC on September 20, 2017;
- Amendment No. 1 to Annual Report on Form 10-K for the year ended June 30, 2017 filed with the SEC on September 26, 2017;
- Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed with the SEC on November 14, 2017; and
- Current Reports on Form 8-K and 8-K/A, as applicable (excluding any reports or portions thereof that are deemed to be furnished and not filed) with the SEC on June 30, 2017, July 17, 2017, July 18, 2017, July 20, 2017, September 6, 2017, September 12, 2017, September 29, 2017, October 6, 2017, November 17, 2017, December 7, 2017, December 15, 2017, December 21, 2017 and January 10, 2018.

We will provide without charge to each person upon his or her written or oral request, a copy of any or all documents referred to above which have been or may be incorporated by reference into this prospectus, excluding exhibits to those documents unless they are specifically incorporated by reference into those documents. You can request those documents from Akoustis Technologies, Inc., at 9805 Northcross Center Court, Suite A, Huntersville, NC 28078, attn: Andrew Wright. You also may contact us at (704) 997-5735 or visit our website at <http://www.akoustis.com>, under the "Investors" section, for copies of those documents. Our website and the information contained on, or that can be accessed through, our website are not a part of this prospectus, and you should not rely on any such information in making your decision whether to purchase the shares offered hereby.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 102(b)(7) of the DGCL allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Company's certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL, or 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 or she 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 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 or she 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.

The Company's Certificate of Incorporation provides that the liability of directors for monetary damages shall be eliminated to the fullest extent under applicable law. The Company's By-Laws state that the Company shall indemnify every present or former director, officer, employee, or agent of the Company or person who is or was serving at the Company's request as a director, officer, member, manager, partner, trustee, fiduciary, employee or agent of another corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise (each an "Indemnitee").

The Company's By-Laws provide that the Company shall indemnify an Indemnitee against all judgments, fines, amounts paid in settlement and reasonable expenses actually and reasonably incurred by the Indemnitee in connection with any proceeding in which he was, or is threatened to be made, a party by reason of his serving or having served, if it is determined that the Indemnitee (a) acted in good faith, (b) reasonably believed that such action was in, or not opposed to, the Company's best interests and (c) in the case of any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful; provided, however, that the Company shall not be obligated to indemnify an Indemnitee that was threatened to be made a party but does not become a party unless the incurring of such expenses was authorized by or under the authority of the Board of Directors, and the Company shall not be obligated to indemnify against any amount paid in settlement unless the Board of Directors has consented to such settlement. In any action brought by or in the right of the Company to procure a judgment in its favor, no indemnification shall be made in respect of any proceeding if a final adjudication establishes that the Indemnitee is liable to the Company, unless the court determines that such person is fairly and reasonably entitled to indemnity. The Company may indemnify an Indemnitee who has served, or prepared to serve, as a witness in, but is not a party to, any action, suit, or proceeding. The termination of any proceeding by judgment, order, settlement or conviction, or on a plea of nolo contendere or its equivalent, is not of itself determinative that the Indemnitee did not meet the requirements set forth in clauses (a) through (c) above.

Expenses incurred by any present or former director or officer of the Company in defending any civil, criminal, administrative, or investigative action, suit, or proceeding, shall be paid by the Company in advance of the final disposition of such action, suit, or proceeding upon receipt of an undertaking in writing by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to indemnification. Expenses and costs incurred by other Indemnitees may be paid by the Company in advance of the final disposition of such action, suit, or proceeding upon a similar undertaking.

Other than discussed above, neither the Company's By-Laws nor its Certificate of Incorporation includes any specific indemnification provisions for the Company's officers or directors against liability under the Securities Act. The Company has also purchased insurance providing for indemnification of its directors and officers. Additionally, insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

PART I
INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.*

Item 2. Registration Information and Employee Plan Annual Information.*

* Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act and the “Note” to Part I of Form S-8.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Company with the SEC are incorporated herein by reference:

- (a) The Company’s Annual Report on Form 10-K for the year ended June 30, 2017 filed with the SEC on September 20, 2017;
- (b) Amendment No. 1 to the Company’s Annual Report on Form 10-K for the year ended June 30, 2017 filed with the SEC on September 26, 2017;
- (c) The Company’s Quarterly Report on Form 10-Q for the quarter ended September 30, 2017 filed with the SEC on November 14, 2017;
- (d) The Company’s Current Reports on Form 8-K and 8-K/A, as applicable, filed with the SEC on June 30, 2017, July 17, 2017, July 18, 2017, July 20, 2017, September 6, 2017, September 12, 2017, September 29, 2017, October 6, 2017, November 17, 2017, December 7, 2017, December 15, 2017, December 21, 2017, and January 10, 2018;
- (e) All other reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), since the year ended June 30, 2017; and
- (f) The description of the Company’s Common Stock as set forth in the Company’s Registration Statement on Form S-1 (File No. 333-222552), filed with the SEC on January 16, 2018.

All documents subsequently filed by the Company with the SEC under Sections 13(a), 13(c), 14 and 15(d), as applicable, of the Exchange Act, prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this Registration Statement and to be a part hereof from the date of filing of such documents; provided, however, that documents or information deemed to have been furnished and not filed in accordance with SEC rules shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or deemed to be incorporated by reference herein 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 Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102(b)(7) of the DGCL allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Company's certificate of incorporation provides for this limitation of liability.

Section 145 of the DGCL, or 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 or she 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 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 or she 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.

The Company's Certificate of Incorporation provides that the liability of directors for monetary damages shall be eliminated to the fullest extent under applicable law. The Company's By-Laws state that the Company shall indemnify every present or former director, officer, employee, or agent of the Company or person who is or was serving at the Company's request as a director, officer, member, manager, partner, trustee, fiduciary, employee or agent of another corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise (each an "Indemnitee").

The Company's By-Laws provide that the Company shall indemnify an Indemnitee against all judgments, fines, amounts paid in settlement and reasonable expenses actually and reasonably incurred by the Indemnitee in connection with any proceeding in which he was, or is threatened to be made, a party by reason of his serving or having served, if it is determined that the Indemnitee (a) acted in good faith, (b) reasonably believed that such action was in, or not opposed to, the Company's best interests and (c) in the case of any criminal proceeding, had no reasonable cause to believe that his conduct was unlawful; provided, however, that the Company shall not be obligated to indemnify an Indemnitee that was threatened to be made a party but does not become a party unless the incurring of such expenses was authorized by or under the authority of the Board of Directors, and the Company shall not be obligated to indemnify against any amount paid in settlement unless the Board of Directors has consented to such settlement. In any action brought by or in the right of the Company to procure a judgment in its favor, no indemnification shall be made in respect of any proceeding if a final adjudication establishes that the Indemnitee is liable to the Company, unless the court determines that such person is fairly and reasonably entitled to indemnity. The Company may indemnify an Indemnitee who has served, or prepared to serve, as a witness in, but is not a party to, any action, suit, or proceeding. The termination of any proceeding by judgment, order, settlement or conviction, or on a plea of nolo contendere or its equivalent, is not of itself determinative that the Indemnitee did not meet the requirements set forth in clauses (a) through (c) above.

Expenses incurred by any present or former director or officer of the Company in defending any civil, criminal, administrative, or investigative action, suit, or proceeding, shall be paid by the Company in advance of the final disposition of such action, suit, or proceeding upon receipt of an undertaking in writing by or on behalf of such person to repay such amount if it shall ultimately be determined that such person is not entitled to indemnification. Expenses and costs incurred by other Indemnitees may be paid by the Company in advance of the final disposition of such action, suit, or proceeding upon a similar undertaking.

Other than discussed above, neither the Company's By-Laws nor its Certificate of Incorporation includes any specific indemnification provisions for the Company's officers or directors against liability under the Securities Act. The Company has also purchased insurance providing for indemnification of its directors and officers. Additionally, insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 7. Exemption From Registration Claimed.

All of the shares of Common Stock issued by us to the selling stockholders who are reoffering and reselling such shares of Common Stock pursuant to this Registration Statement were issued in reliance upon the exemption from registration under Section 4(a)(2) of the Securities Act relating to sales by an issuer not involving any public offering or Rule 701 promulgated under the Securities Act.

Item 8. Exhibits.

The exhibits listed in the accompanying Exhibit Index are filed as a part of this Registration Statement:

Item 9. Undertakings.

- (a) The undersigned Company 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent 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) and (a)(1)(ii) above 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 Commission by the Company pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference into this Registration Statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment 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.
- (b) The undersigned Company hereby undertakes that, for the purposes of determining any liability under the Securities Act, each filing of the Company's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act that is incorporated by reference into this 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.
- (c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the 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 Company of expenses incurred or paid by a director, officer or controlling person of the Company 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 Company 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, Akoustis Technologies, Inc. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Huntersville, State of North Carolina, on February 7, 2018.

AKOUSTIS TECHNOLOGIES, INC.

By: /s/ Jeffrey B. Shealy
Jeffrey B. Shealy
President and Chief Executive Officer

POWER OF ATTORNEY

Each of the undersigned, being a director and/or officer of Akoustis Technologies, Inc. (the "Company"), hereby nominates, constitutes and appoints Jeffrey B. Shealy, John T. Kurtzweil, Andrew Wright or any one of them severally, to be his or her true and lawful attorney-in-fact and agent and to sign in his or her name and on his or her behalf in any and all capacities stated below, and to file with the Securities and Exchange Commission (the "Commission") this Registration Statement on Form S-8 (the "Registration Statement"), and to file any and all amendments, including post-effective amendments, exhibits and other documents and instruments in connection therewith, to the Registration Statement, making such changes to the Registration Statement as such attorney-in-fact and agent deems appropriate, and generally to do all such things on his or her behalf in any and all capacities stated below to enable the Company to comply with the provisions of the Securities Act of 1933, as amended (the "Securities Act"), and all requirements of the Commission.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities indicated on February 7, 2018.

<u>Signature</u>	<u>Title</u>
<u>/s/ Jeffrey B. Shealy</u> Jeffrey B. Shealy	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ John T. Kurtzweil</u> John T. Kurtzweil	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
<u>/s/ Arthur E. Geis</u> Arthur E. Geis	Co-Chairman of the Board
<u>/s/ Jerry D. Neal</u> Jerry D. Neal	Co-Chairman of the Board
<u>Steven P. DenBaars</u>	Director
<u>Jeffrey K. McMahon</u>	Director

Signature

Title

/s/ Steven P. Miller
Steven P. Miller

Director

Suzanne B. Rudy

Director

EXHIBIT INDEX

Exhibit Number	Description
<u>4.1*</u>	<u>Specimen certificate representing the Common Stock of the Company</u>
<u>4.2</u>	<u>Plan of Conversion, dated December 15, 2016 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)</u>
<u>4.3</u>	<u>Articles of Conversion of the Company, as filed with the Nevada Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on December 16, 2016)</u>
<u>4.4</u>	<u>Certificate of Conversion of the Company, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>4.5</u>	<u>Certificate of Incorporation, as filed with the Delaware Secretary of State on December 15, 2016 (incorporated by reference to Exhibit 3.3 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>4.6</u>	<u>Bylaws of the Company (incorporated by reference to Exhibit 3.4 to the Company's Current Report on Form 8-K filed with the SEC on December 15, 2016)</u>
<u>5.1*</u>	<u>Legal Opinion of Womble Bond Dickinson (US) LLP</u>
<u>23.1*</u>	<u>Consent of Marcum LLP</u>
<u>23.2*</u>	<u>Consent of Womble Bond Dickinson (US) LLP (included in Exhibit 5.1)</u>
<u>24.1*</u>	<u>Power of Attorney (included on Signature Page)</u>
<u>99.1.1</u>	<u>Akoustis, Inc. 2014 Stock Plan (incorporated by reference to Exhibit 10.10 to the Company's Transition Report on Form 10-K filed with the SEC on October 31, 2016)</u>
<u>99.1.2</u>	<u>Declaration of Amendment to the Akoustis, Inc. 2014 Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 14, 2017)</u>
<u>99.2.1</u>	<u>Akoustis Technologies, Inc. 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K filed with the SEC on May 29, 2015)</u>
<u>99.2.2</u>	<u>Declaration of Amendment to the Akoustis Technologies, Inc. 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed with the SEC on November 14, 2017)</u>

* Filed herewith

NOT VALID UNLESS COUNTERSIGNED BY TRANSFER AGENT
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE

AKOUSTIS
SMART SELECTIVITY SOLUTIONS

CUSIP NO. 00473N 10 2

AKOUSTIS TECHNOLOGIES, INC.

AUTHORIZED COMMON STOCK: 45,000,000 SHARES
PAR VALUE: \$0.001

THIS CERTIFIES THAT

IS THE RECORD HOLDER OF

— Shares of **Akoustis Technologies, Inc.** Common Stock —

transferable on the books of the Corporation in person or by duly authorized attorney upon surrender of this Certificate properly endorsed. This Certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.

Witness the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.

Dated: _____


SECRETARY




PRESIDENT, CEO

Countersigned & Registered: Globex Transfer, LLC
(813) 344-4490

By _____
Authorized Signature

[WOMBLE BOND DICKINSON (US) LLP LETTERHEAD]

February 7, 2018

Akoustis Technologies, Inc.
9805 Northcross Center Court, Suite A
Huntersville, NC 28078

Re: Registration Statement on Form S-8 Relating to the Akoustis, Inc. 2014 Stock Plan, as amended (the “2014 Plan”) and the Akoustis Technologies, Inc. 2015 Equity Incentive Plan, as amended (the “2015 Plan” and, together with the 2014 Plan, the “Plans”)

Ladies and Gentlemen:

We have acted as counsel to Akoustis Technologies, Inc., a Delaware corporation (the “Company”), in connection with the preparation of the Company’s registration statement on Form S-8 (the “Registration Statement”) under the Securities Act of 1933, as amended (the “1933 Act”), filed by the Company with the U.S. Securities and Exchange Commission (the “Commission”) on the date hereof. The Registration Statement relates to 1,285,636 shares of the Company’s common stock, par value \$0.001 per share (the “Shares”), of which (i) 516,815 have been issued by the Company pursuant to restricted stock awards granted under the 2014 Plan (the “2014 Selling Stockholder Shares”), (ii) 608,821 have been issued by the Company pursuant to restricted stock awards granted under the 2015 Plan (the “2015 Selling Stockholder Shares” and together with the 2014 Selling Stockholder Shares, the “Selling Stockholder Shares”), and (iii) 160,000 may be issued by the Company pursuant to the exercise of outstanding stock options granted under the 2015 Plan (the “Selling Stockholder Option Shares”). The Shares may be offered and sold by certain selling stockholders pursuant to the reoffer prospectus contained in the Registration Statement.

This opinion is being furnished pursuant to and in accordance with the requirements of Item 8(a) of Form S-8 and Item 601(b)(5) of Regulation S-K under the 1933 Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement, the prospectus or any prospectus supplement other than as expressly stated herein with respect to the issuance of the Shares.

As the Company’s counsel, we have examined originals or copies, certified or otherwise identified to our satisfaction, of the Company’s certificate of incorporation and bylaws, each as amended to date, and minutes and records of the corporate proceedings of the Company relating to the filing of the Registration Statement and the issuance of the Shares, as provided to us by the Company, certificates of public officials and of representatives of the Company, and statutes and other instruments and documents, as a basis for the opinions hereinafter expressed. In rendering this opinion, we have relied upon certificates of public officials and representatives of the Company with respect to the accuracy of the factual matters contained in such certificates.

For the purpose of this opinion, we have assumed (a) the genuineness of all signatures and the legal capacity of all signatories; (b) the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as certified or photostatic copies; and (c) the proper issuance and accuracy of certificates of public officials and representatives of the Company. In rendering opinions as to future events, we have assumed the facts and law existing on the date hereof.

Based on and subject to the foregoing, and having regard for such legal considerations as we deem relevant, it is our opinion that the Shares have been duly authorized by all necessary corporate action on the part of the Company and:

1. The Selling Stockholder Option Shares, when issued and delivered against payment therefor in the manner contemplated in the 2015 Plan, will be validly issued, fully paid and nonassessable.

2. The Selling Stockholder Shares are validly issued, fully paid and nonassessable.

This opinion is limited to the Delaware General Corporation Law (“DGCL”) as currently in effect, and we are expressing no opinion as to the effect of the laws of any other jurisdiction.

This opinion is rendered as of the date hereof, and we undertake no obligation to advise you of any changes in applicable law or any other matters that may come to our attention after the date hereof.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the reference to the name of our firm under the heading “Legal Matters” in the Registration Statement. In giving this consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the 1933 Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Womble Bond Dickinson (US) LLP

WOMBLE BOND DICKINSON (US) LLP

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Akoustis Technologies, Inc. (the "Company") on Form S-8 of our report dated September 19, 2017, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the consolidated financial statements of Akoustis Technologies, Inc. and Subsidiaries as of June 30, 2017 and 2016 and for the years then ended appearing in the Annual Report on Form 10-K of Akoustis Technologies, Inc. for the year ended June 30, 2017, and the incorporation by reference of our report dated September 11, 2017, with respect to our audit of the special purpose combined financial statements of The Research Foundation for the State University of New York and Fuller Road Management Corporation as of June 26, 2017 and for the years ended June 30, 2016 and 2015 appearing in the Current Reports on Form 8-K/A of Akoustis Technologies, Inc. filed on September 12, 2017. We also consent to the reference to our firm under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Marcum llp

Marcum llp
New York, NY
February 7, 2018