Registration No. 333-212508

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

**Post-Effective Amendment No. 1** 

to FORM S-1

**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)

**3661** (Primary Standard Industrial Classification Code Number)

(I.R.S. Employer Identification Number)

33-1229046

9805 Northcross Center Court, Suite H Huntersville, NC 28078 (704)-997-5735

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

Jeffrey B. Shealy, CEO Akoustis Technologies, Inc. 9805 Northcross Center Court, Suite H Huntersville, NC 28078 (704) 997-5735

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

Adam P. Wheeler, Esq. Womble Carlyle Sandridge & Rice, LLP 1200 Nineteenth Street NW, Suite 500 Washington, DC 20036 (202) 467-6900

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

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

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

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

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

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

Large accelerated filer Non-accelerated filer  $\Box$  (Do not check if a smaller reporting company)

Accelerated filer□Smaller reporting company☑

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

#### EXPLANATORY NOTE

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-212508) (the "Registration Statement") of Akoustis Technologies, Inc. (the "Company") is being filed pursuant to the undertakings in Item 17 of the Registration Statement to update and supplement the information contained in the Registration Statement, as originally declared effective by the Securities and Exchange Commission (the "SEC") on July 22, 2016, to (i) include the information contained in the Company's Transition Report on Form 10-K for the transition period ended June 30, 2016 that was filed with the SEC on October 31, 2016, (ii) include the information contained in the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2016 that was filed with the SEC on November 14, 2016, (iii) update certain information to reflect the Company's reincorporation from the State of Nevada to the State of Delaware, and (iv) update certain other information in the Registration Statement.

The Registration Statement originally registered the resale of a total of 4,024,900 shares of the Company's common stock, par value \$0.001 (the "Common Stock") including (i) 2,530,000 outstanding shares of the Common Stock, (ii) 153,714 shares of Common Stock issuable upon exercise of Common Stock purchase warrants, and (iii) up to 1,341,186 shares of Common Stock issuable pursuant to the price-protected anti-dilution provision applicable to 2,235,310 of the outstanding shares referenced in (i) above. Since that time, none of the respective warrants have been exercised, 340,858 shares of Common Stock covered by the Registration Statement have been resold, and the rights provided by the price-protected anti-dilution provision have expired. Accordingly, this Post-Effective Amendment No. 1 to the Registration Statement covers a total of 2,342,856 shares of Common Stock, including (a) 2,189,142 outstanding shares of Common Stock and (b) 153,714 shares of Common Stock issuable upon exercise of Common Stock purchase warrants.

No additional securities are being registered under this Post-Effective Amendment No. 1. All applicable registration fees were paid at the time of the original filing of the Registration Statement.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated December 19, 2016



### **AKOUSTIS TECHNOLOGIES, INC.**

Prospectus 2,342,856 Shares Common Stock

This prospectus relates to the sale of up to 2,342,856 shares of our common stock, par value \$0.001 per share (the "Common Stock"), by the selling stockholders of Akoustis Technologies, Inc., a Delaware corporation, listed in this prospectus. Of the shares being offered, 2,189,142 are presently issued and outstanding and 153,714 are issuable upon exercise of Common Stock purchase warrants. The shares offered by this prospectus may be sold by the selling stockholders from time to time in the open market, through privately negotiated transactions or a combination of these methods, at market prices prevailing at the time of sale or at negotiated prices.

The distribution of the shares by the selling stockholders is not subject to any underwriting agreement. We will not receive any 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.

Our Common Stock is traded on OTC Markets (OTCQB) under the symbol "AKTS." On December 12, 2016, the last reported sale price for our Common Stock was \$5.61 per share.

We are an "Emerging Growth Company" as defined in the Jumpstart our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings. See "Prospectus Summary - Implications of Being an Emerging Growth Company."

# 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 9 of this prospectus.

You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information. This prospectus may only be used where it is legal to sell these securities. The information in this prospectus is only accurate on the date of this prospectus, regardless of the time of any sale of securities.

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.

This prospectus is dated December 19, 2016.

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

	Page
PROSPECTUS SUMMARY	1
NOTE REGARDING FORWARD-LOOKING STATEMENTS	6
<u>RISK FACTORS</u>	8
SELLING STOCKHOLDERS	31
<u>USE OF PROCEEDS</u>	38
DETERMINATION OF OFFERING PRICE	38
MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS	38
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	40
DESCRIPTION OF BUSINESS	55
LEGAL PROCEEDINGS	71
DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS	72
EXECUTIVE COMPENSATION	78
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	84
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	86
PLAN OF DISTRIBUTION	88
DESCRIPTION OF SECURITIES	91
LEGAL MATTERS	98
<u>EXPERTS</u>	98
WHERE YOU CAN FIND MORE INFORMATION	99
INDEX TO FINANCIAL STATEMENTS	F-1

i

#### 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, the risks of purchasing our Common Stock discussed under the "Risk Factors" section, and our financial statements and the accompanying notes to the financial statements.

Unless the context indicates otherwise, all references in this registration statement to "Akoustis Technologies," the "Company," "we," "us" and "our" refer to Akoustis Technologies, Inc. and its wholly owned consolidated subsidiary, Akoustis, Inc., and references to Akoustis refer to Akoustis, Inc.

This prospectus includes the trademarks of Akoustis, Inc., Akoustis<sup>TM</sup> and BulkOne<sup>TM</sup>, 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 fundamentally new piezoelectric resonator technology that we call BulkONE<sup>TM</sup> 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. Filters are a critical component of the RF front-end (RFFE), and their use has multiplied with the launch and licensing of 4G/LTE 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 RF filters with a fundamental advantage to reduce losses over existing thin film technologies. Our technology has not yet obtained market validation from Tier I mobile wireless customers or been verified in commercial manufacturing, and our RF filters have yet to generate any sales. We have incurred accumulated losses from our inception through September 30, 2016 of \$8.7 million. We have fabricated research and development ("R&D") resonators demonstrating the feasibility of our BulkONE technology, and have transitioned the technology into a production-capable wafer fabrication facility.

Once our technology is qualified for manufacturing, 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 RFFE market, which can be used to make duplexer or multiplexer filter products necessary for the mobile Internet. These products present the greatest near-term potential for commercialization of our technology. According to a McKinsey Global Institute report dated May 2013, the Mobile Internet, the so-called "Internet of Things" (IoT), as well as advanced materials including piezoelectric ceramics and crystals are included in the twelve potentially economically disruptive technologies with an estimated economic value impact that could be over \$25 trillion.

For a glossary of technical terms used herein, see "Description of Business – Glossary" below.

### **Organizational History**

We were incorporated as Danlax, Corp., in Nevada on April 10, 2013. Prior to the Merger (as defined below), our business was the development and sales of mobile games.

On May 22, 2015, our wholly owned subsidiary, Akoustis Acquisition Corp., a corporation formed in the State of Delaware on May 15, 2015, merged (the "Merger") with and into Akoustis, Inc., a corporation incorporated in the State of Delaware on May 12, 2014. Akoustis, Inc., was the surviving corporation in the Merger and became our wholly owned subsidiary. All of the outstanding stock of Akoustis, Inc., was exchanged for shares of our Common Stock, as described in more detail under "Description of Business - Organizational History."

As a result of the Merger, we discontinued our pre-Merger business and acquired the business of Akoustis, Inc., and we have continued the existing business operations of Akoustis, Inc. as a publicly-traded company under the name Akoustis Technologies, Inc.

On December 15, 2016, our stockholders approved the reincorporation of the Company from the State of Nevada to the State of Delaware, pursuant to a plan of conversion. On that same day, we filed Articles of Conversion in the State of Nevada and a Certificate of Conversion and Certificate of Incorporation in the State of Delaware. As a result, as of December 15, 2016, Akoustis Technologies, Inc. is a Delaware corporation.

In accordance with "reverse merger" accounting treatment, our historical financial statements as of period ends, and for periods ended, prior to the Merger were replaced with the historical financial statements of Akoustis, Inc., in our SEC filings made subsequent to the Merger.

### **Capital Needs**

The Company believes that it has sufficient cash to fund its operations until June 30, 2017. However, there is no assurance that the Company's projections and estimates are accurate. In the event that the Company does not receive anticipated proceeds from research grants or such grant payments are delayed, or the Company experiences costs in excess of estimates to continue its research and development plan, it is possible that the Company would not have sufficient resources to continue as a going concern for the next year. 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 2,342,856 shares of our Common Stock. Of the shares being offered, 2,189,142 are presently issued and outstanding and 153,714 are issuable upon exercise of Common Stock purchase warrants. 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.
- The wireless communication industry is subject to ongoing regulatory obligations and review. 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.
- 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.
- 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.
- There currently is a very limited market for our Common Stock, and there can be no assurance that a consistent trading market will ever develop. Failure to develop or maintain a trading market could negatively affect the value of our Common Stock and make it difficult or impossible for you to sell your shares.
- We may not generate revenues or achieve profitability.
- Our products may not be 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 H, Huntersville, North Carolina 28078. Our telephone number is (704) 997-5735. Our website address is *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 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 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, or the Exchange Act, and have elected to take advantage of certain of the scaled disclosure requirements available for smaller reporting companies.

#### The Offering

Common stock currently outstanding	16,158,981 shares (1)
Preferred stock currently outstanding	None
Common stock offered by the Company	None
Common stock offered by the selling stockholders	2,342,856 shares (2)
Use of proceeds	We will not receive any of the proceeds from the sales of our Common Stock by the selling stockholders.
OTC Markets symbol	AKTS
Risk Factors	You should carefully consider the information set forth in this prospectus and, in particular, the specific factors set forth in the "Risk Factors" section beginning on page 9 of this prospectus before deciding whether or not to invest in shares of our Common Stock.

(1) As of December 12, 2016. This number excludes outstanding warrants and options to purchase an aggregate of 631,698 shares of Common Stock. This number also excludes shares of Common Stock that may become issuable pursuant to the price-protected anti-dilution provision applicable to 322,000 of the outstanding shares. See "Description of Business—The Second 2016 Offering."

(2) Consists of 2,189,142 outstanding shares of Common Stock and 153,714 shares of Common Stock issuable upon exercise of Common Stock purchase warrants.

### 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 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, and (iv) the assumptions underlying or relating to any statement described in points (i), (ii) or (iii) 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 revenues or achieve profitability,
- · our inability to achieve acceptance of our products in the market,
- · 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 substantial reliance on third parties to manufacture products,
- · existing or increased competition,
- · failure to innovate or adapt to new or emerging technologies,
- · results of arbitration and litigation,
- stock volatility and illiquidity, and
- our failure to implement our business plans or strategies.

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. 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.

7

#### **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.

This prospectus contains certain statements relating to future events or the future financial performance of our company. Prospective investors are cautioned that such statements are only predictions and involve risks and uncertainties, and that actual events or results may differ materially. In evaluating such statements, prospective investors should specifically consider the various factors identified in this prospectus, including the matters set forth below, which could cause actual results to differ materially from those indicated by such forward-looking statements.

If any of the following or other risks materialize, our business, financial condition, and results of operations could be materially adversely affected which, in turn, could adversely impact the value of our Common Stock. In such a case, investors in our Common Stock could lose all or part of their investment.

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 have been a shell company with no operating history and no assets other than cash. Upon consummation of the Merger with Akoustis, Inc., we redirected our business focus towards the development of advanced single crystal bulk acoustic wave filter products for RF front-ends for use in the mobile wireless device industry. Although Akoustis since its inception focused its activity on research and development ("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 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, 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 never generated any revenues; our only income has been from R&D grants. We have experienced net losses of approximately \$8.7 million for the period from May 12, 2014 (inception) to September 30, 2016. 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 research and development 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 to use 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 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 RF front-end products, in particular. Our 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.

#### Our products 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 transitioning this technology into a production-capable wafer 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. 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 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:

- · 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, Cindy Payne, our Chief Financial Officer, Mark Boomgarden, our Vice President of Operations, David Aichele, our Vice President of Business Development, Richard Ogawa, our Special Legal Advisor, 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.

### We substantially rely on third parties to manufacture our RF filters.

We employ a "fabless" business strategy, meaning that we do not own a semiconductor fabrication facility, or fab, and do not currently have the infrastructure or capability internally, such as our own manufacturing facilities, to manufacture our wafers and our filters for use in commercial quantities. Instead, we leverage the capital investments and capacity of manufacturers to fabricate our wafers. Therefore, success of implementation of our single-crystal BAW technology for manufacturing our RF filters and its commercial production will substantially depend on our ability to develop, maintain and expand our strategic relationships with manufacturers that will fabricate wafers or our ability to put in place the infrastructure and internal capacity necessary to fabricate wafers. Any impairment in our relationship with these manufacturers could have a material adverse effect on our business, results of operations, cash flow and financial condition. Although we have entered into a joint development agreement and a foundry agreement with Global Communication Semiconductors, LLC ("GCS"), and may explore other plans to enter into agreements with more manufacturers, to fabricate our RF filters for R&D and for commercial sales, there can be no assurance that we will be able to retain those relationships on commercially reasonable terms, if at all. Since we expect to depend upon one or a limited number of these manufacturers for a signification portion of our revenue in the future, we could experience delays in the launch and commercial productions of our RF filters if we are unable to maintain those relationships.

Reliance on a limited number of manufacturers also may expose us to the following risks:

- We may be unable to identify manufacturers on acceptable terms, or at all, because the number of potential manufacturers is limited. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for manufacturing of, our wafers.
- Our manufacturers might be unable to formulate and manufacture wafers in the volume and of the quality required to meet demands of our R&D and commercial needs.
- Our manufacturers may not perform as contractually agreed or may not remain in the manufacturing business for the time required to successfully produce, store and distribute our products.
- Since our filters are not sold directly to the end-user, but are components of other products, we highly depend upon selection of our design and technology by these manufacturers from among alternative offerings and including and incorporating our filters into their final product.

Each of these risks could delay the commercialization of our RF filters and its market acceptance, result in higher costs or deprive us of potential product revenues.

# We rely on our independent contractors in adequately performing their contractual obligations, meeting expected deadlines and applicable regulatory requirements.

We depend on our independent contractors to adequately perform a substantial part of our projects and successfully carry their contractual duties and obligations. However, these contractors may not assign as a great priority a process of developing our technology in accordance with our levels of quality control, may not meet expected deadlines, may not devote sufficient time to develop our technology, or may not pursue their contractual obligations as diligently as we would if we were undertaking such activities ourselves. They may also establish relationships with other commercial entities, some of which may compete with us. If our contractors assist our competitors to our detriment, our competitive position would be harmed. If our independent contractors fail to perform their contractual duties at acceptable quality levels or meet expected deadlines, if they need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to a failure to adhere to our protocols, legal and regulatory requirements or for other reasons, the development and commercialization of our filters could be stopped, delayed, or made less profitable. As a result, our operations and the commercial prospects for marketing of our RF filters would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

### 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. While we intend to supply design and to monitor fabrication of our RF filters by our manufacturers, we may not be able to monitor their quality control, their quality assurance and their qualified personnel. If 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 by our manufacturers would significantly impact our ability to develop and implement our technology and to improve performance of our RF filters. Our inability to timely find a substitute manufacturer that can 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 and may lose access to technologies critical to our products.

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.

In the United States, we have eleven pending patent applications, one filing for which claims have been allowed and one filing that was published on June 7, 2016; 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 RF front-end mobile market and our ability to commercialize our RF filters with technology protected by those patents could be threatened.

We have four pending patent applications, and an additional three utility patents have been awarded outside of the United States. The three issued applications entered the divisional process and are anticipated to result in up to six granted patents outside of the United States. However, our pending patent applications may fail to result in issued patents outside of the United States, which may significantly limit 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. 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 entered into the Joint Development Agreement with GCS and may enter in the future into joint development agreements with other 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 dates 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 we are applying for substantial additional grants in the calendar years 2016 and 2017 that we believe we are likely to be awarded, and we are launching a sales channel for non-resonator catalog parts in 2016, both of which are expected to provide cash flows to help support the development and commercialization of our resonator technology, we do not expect meaningful revenues from our resonator technology until at least the second half of the calendar year 2017. 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 in the mobile wireless market. 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. However, if adequate funds are not available to us when we need them, and we are unable to commercialize our products giving us access to additional cash resources, we will be required to curtail our operations, which would, in turn, further raise 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
- that 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**

# The wireless communication industry is subject to ongoing regulatory obligations and review. 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.

Our business and products in development are subject to regulation by various federal and state governmental agencies, including the radio frequency emission regulatory activities of the FCC, the consumer protection laws of the Federal Trade Commission, the import/export regulatory activities of the Department of Commerce, the product safety regulatory activities of the Consumer Products Safety Commission, and the environmental regulatory activities of the Environmental Protection Agency.

The rules and regulations of the FCC limit the RF used by, and level of power emitting from, electronic equipment. Our RF filters, as a key element enabling consumer electronic smartphone equipment, are required to comply with these FCC rules, and may require certification, verification or registration of our RF filters with the FCC. Certification and verification of new equipment requires testing to ensure the equipment's compliance with the FCC's rules. The equipment must be labeled according to the FCC's rules to show compliance with these rules. Testing, processing of the FCC's equipment certificate or FCC registration and labeling may increase development and production costs and could delay the implementation of our BulkOne acoustic wave resonator technology for our RF filters and the launch and commercial productions of our filters into the U.S. market. Electronic equipment permitted or authorized to be used by us through FCC certification or verification procedures must not cause harmful interference to licensed FCC users, and may be subject to RF interference from licensed FCC users. Selling, leasing or importing non-compliant equipment is considered a violation of FCC rules and federal law, and violators may be subject to an enforcement action by the FCC. Any failure to comply with the applicable rules and regulations of the FCC could have an adverse effect on our business, operating results and financial condition by increasing our compliance costs and/or limiting our sales in the United States.



The semiconductor and electronics industries also have been subject to increasing environmental regulations. A number of domestic and foreign jurisdictions seek to restrict the use of various substances, a number of which have been used in our products in development or processes. For example, the European Union Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive now requires that certain substances be removed from all electronics components. Removing such substances requires the expenditure of additional research and development funds to seek alternative substances, as well as increased testing by third parties to ensure the quality of our products and compliance with the RoHS Directive. While we have implemented a compliance program to ensure our product offering meets these regulations, there may be instances where alternative substances will not be available or commercially feasible, or may only be available from a single source, or may be significantly more expensive than their restricted counterparts. Additionally, if we were found to be non-compliant with any such rule or regulation, we could be subject to fines, penalties and/or restrictions imposed by government agencies that could adversely affect our operating results. Our cost to maintain compliance with existing environmental regulations is expected to be nominal based on our business structure in which we outsource a majority of our operations to suppliers that are responsible for meeting environmental regulations. We will continue to monitor our quality program and expand as required to maintain compliance and ability to audit our supply chain.

Noncompliance with applicable regulations or requirements could 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 anticipate that we will first be required to comply with the SEC's conflict minerals rules for the 2017 calendar year, and we expect to incur costs associated with implementing 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.

# 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.

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 "blank check" 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. In addition, as of December 12, 2016, warrants and options to purchase an aggregate of 631,698 shares of our Common Stock remained outstanding. Certain of our stockholders also have anti-dilution protections, as discussed below under "Description of Business—The Second 2016 Offering." The future issuance of any such additional shares of our Common Stock may create downward pressure on the trading price of the Common Stock. We will need to raise 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.

# There currently is a limited market for our Common Stock and there can be no assurance that an active public market will ever develop. Failure to develop or maintain an active trading market could negatively affect the value of our Common Stock and make it difficult or impossible for you to sell your shares.

There is currently only a very limited public market for shares of our Common Stock, and an active trading market may never develop. Our Common Stock is quoted on the OTC Markets. The OTC Markets is a thinly traded market and lacks the liquidity of certain other public markets with which some investors may have more experience. We may not ever be able to satisfy the listing requirements for our Common Stock to be listed on a national securities exchange, which is often a more widely-traded and liquid market. Some, but not all, of the factors which may delay or prevent the listing of our Common Stock on a more widely-traded and liquid market include the following: our stockholders' equity may be insufficient; the market value of our outstanding securities may be too low; our net income from operations may be too low; our Common Stock may not be sufficiently widely held; we may not be able to secure market makers for our Common Stock; and we may fail to meet the rules and requirements mandated by the several exchanges and markets to have our Common Stock listed. Should we fail to satisfy the initial listing standards of the national exchanges, or our Common Stock is otherwise rejected for listing, and remains quoted on the OTC Markets or is suspended from the OTC Markets, the trading price of our Common Stock could suffer, the trading market for our Common Stock may be less liquid, and the price of our Common Stock may be subject to increased volatility.

# Our Common Stock may be subject to the "penny stock" rules of the SEC and the trading market in the securities is limited, which makes transactions in the stock cumbersome and may reduce the value of an investment in the stock.

Rule 15g-9 under the Exchange Act establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. The price of our Common Stock over the last 12 months has ranged from below \$5.00 per share to above \$5.00 per share. For any transaction involving a penny stock, unless exempt, the rules require: (a) that a broker or dealer approve a person's account for transactions in penny stocks; and (b) the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must: (a) obtain financial information and investment experience objectives of the person and (b) make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form: (a) sets forth the basis on which the broker or dealer made the suitability determination; and (b) confirms that the broker or dealer received a signed, written agreement from the investor prior to the transaction. Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our Common Stock and cause a decline in the market value of our Common Stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker or dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

# Our stock may be traded infrequently and in low volumes, so you may be unable to sell your shares at or near the quoted bid prices if you need to sell your shares.

Until our Common Stock is listed on a national securities exchange such as the New York Stock Exchange or the Nasdaq Stock Market, we expect our Common Stock to remain eligible for quotation on the OTC Markets, or on another over-the-counter quotation system, or in the "pink sheets." In those venues, however, the shares of our Common Stock may trade infrequently and in low volumes, meaning that the number of persons interested in purchasing our common shares at or near bid prices at any given time may be relatively small or non-existent. An investor may find it difficult to obtain accurate quotations as to the market value of our Common Stock or to sell his or her shares at or near bid prices or at all. In addition, if we fail to meet the criteria set forth in SEC regulations, various requirements would be imposed by law on broker-dealers who sell our securities to persons other than established customers and accredited investors. Consequently, such regulations may deter broker-dealers from recommending or selling our Common Stock, which may further affect the liquidity of our Common Stock. This would also make it more difficult for us to raise capital.



### We do not anticipate paying dividends on our Common Stock, and investors may lose the entire amount of their investment.

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 of a positive return on their investment when they sell their shares, nor can we assure that stockholders will not lose the entire amount of their investment.

## We are an emerging growth company, and we cannot be certain if 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 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. Accordingly, 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 billion or more during such fiscal year, (3) the date on which we issue more than \$1 billion in nonconvertible 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. 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 Securities Act, 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 an audit committee, which we expect to establish.

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

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. 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 such 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 in turn could negatively affect the price of our Common Stock.

In particular, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and (if required in the future) our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404. Our compliance with Section 404 may require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group or an audit committee composed of independent directors of the Board, and we will need to retain the services of additional accounting and financial staff or consultants with appropriate public company experience and technical accounting knowledge to satisfy the ongoing requirements of Section 404. We intend to review the effectiveness of our internal controls and procedures and make any changes management determines appropriate, including to achieve compliance with Section 404 by the date on which we are required to so comply.

The risks above do not necessarily comprise all of those associated with an investment in the Company. This prospectus contains forwardlooking statements that involve unknown risks, uncertainties and other factors that may cause the actual results, financial condition, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Factors that might cause such a difference include, but are not limited to, those set out above.

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#### SELLING STOCKHOLDERS

This prospectus covers the resale from time to time by the selling stockholders identified in the table below of (a) up to 1,894,452 outstanding shares of Common Stock sold to investors in our 2016 private placement offering of Common Stock (the "First 2016 Offering"), (b) up to 294,690 outstanding shares of Common Stock held by certain other stockholders, and (c) up to 153,714 shares of Common Stock issuable upon exercise of Common Stock purchase warrants issued to the placement agent in the First 2016 Offering.

The selling stockholders identified in the table below may from time to time offer and sell under this prospectus any or all of the shares of Common Stock described under the columns "Shares of Common Stock owned prior to this Offering and Registered hereby" and "Shares Issuable Upon Exercise of Warrants owned Prior to this Offering and Registered hereby" in the table below.

Certain selling stockholders may be deemed to be "underwriters" as defined in the Securities Act. Any profits realized by such selling stockholders may be deemed to be underwriting commissions.

The table below has been prepared based upon the information furnished to us by the selling stockholders and/or our transfer agent as of the date of this prospectus. 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.

The following table sets forth the name of each selling stockholder, the number of shares of our Common Stock beneficially owned by such stockholder before this offering, the number of shares to be offered for such stockholder's account and the number and (if one percent or more) the percentage of the class to be beneficially owned by such stockholder after completion of the offering. The number of shares owned are those beneficially owned, as determined under the rules of the SEC, and such information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares of our Common Stock as to which a person has sole or shared voting power or investment power and any shares of Common Stock which the person has the right to acquire within 60 days after December 12, 2016 (as used in this section, the "Determination Date"), through the exercise of any option, warrant or right, through conversion of any security or pursuant to the automatic termination of a power of attorney or revocation of a trust, discretionary account or similar arrangement, and such shares are deemed to be beneficially owned and outstanding for computing the share ownership and percentage of the person holding such options, warrants or other rights, but are not deemed outstanding for computing the percentage of any other person. For shares subject to repurchase options, as indicated in the notes to the table below, see "Executive Compensation — Employment Agreements" and "— Restricted Stock Agreements" below for a description of the repurchase option.



Unless otherwise set forth below, based upon the information furnished to us, (a) the persons and entities named in the table have sole voting and sole investment power with respect to the shares set forth opposite the selling stockholder's name, subject to community property laws, where applicable, (b) no selling stockholder had any position, office or other material relationship within the past three years, with us or with any of our predecessors or affiliates, and (c) no selling stockholder is a broker-dealer or an affiliate of a broker-dealer. Selling stockholders who are broker-dealers or affiliates of broker-dealers are indicated by footnote. We have been advised that these broker-dealers and affiliates of broker-dealers who hold shares of Common Stock included in the table below purchased our Common Stock in the ordinary course of business, not for resale. These broker-dealers and affiliates of broker-dealers who hold warrants to purchase shares of Common Stock included in the table below received such warrants as compensation to the placement agents in the First 2016 Offering. We have been advised that, in either case, at the time of such purchase of shares or receipt of warrants, such persons did not have any agreements or understandings, directly or indirectly, with any person to distribute such Common Stock. The number of shares of Common Stock shown as beneficially owned before the offering is based on information furnished to us or otherwise based on information available to us at the timing of the registration statement of which this prospectus forms a part.

Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering	Shares of Common Stock owned Prior to this Offering and Registered hereby	Shares issuable upon Exercise of Warrants owned Prior to this Offering and Registered hereby	Shares of Common Stock Beneficially Owned Upon Completion of this Offering <sup>1</sup>	Percentage of Common Stock Beneficially Owned Upon Completion of this Offering <sup>2</sup>
John L. Acierno III	6,250	6,250	0	0	*
Agharta Capital Ltd.	15,625	15,625	0	0	*
David M. Aichele <sup>3</sup>	136,250	6,250	0	130,000	*
Alex Partners, LLC <sup>4</sup>	352,350	251,000	0	101,350	*
Phillip Alexander <sup>5</sup>	8,210	7,810	0	400	*
Barclay Armitage	15,000	5,000	0	10,000	*
Axiom Capital Management, Inc <sup>6</sup> .**	700	0	700	0	*
Peter Backus	161,600	65,000	0	96,600	*
Peter Bennett <sup>7</sup> **	8,594	0	8,594	0	*
Jonathan and Gina Blatt, JTWROS <sup>8</sup>	32,500	12,500	0	20,000	*
Christopher J. and Denise M. Blum, JTWROS <sup>9</sup>	30,000	13,000	0	17,000	*
Mark D. Boomgarden <sup>10</sup>	245,441	6,250	0	239,191	1.48%
Ben Bowen <sup>**11</sup>	19,095	0	8,594	10,501	*
Andrew Brenner	57,500	20,000	0	37,500	*

Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering	Shares of Common Stock owned Prior to this Offering and Registered hereby	Shares issuable upon Exercise of Warrants owned Prior to this Offering and Registered hereby	Shares of Common Stock Beneficially Owned Upon Completion of this Offering <sup>1</sup>	Percentage of Common Stock Beneficially Owned Upon Completion of this Offering <sup>2</sup>
Brio Capital Master Fund Ltd. <sup>12</sup>	62,892	62,892	0	0	*
Sloan B. Wilson	6,250	6,250	0	0	*
Lee H. and Nancy M. Corbin, JTWROS <sup>13</sup>	15,000	15,000	0	0	*
Kevin M. and Sara J. Drehmer, JTWROS <sup>14</sup>	50,000	10,000	0	40,000	*
EFD Capital Inc. <sup>15**</sup>	34,296	0	6,440	27,856	*
F&M Star Alliance Inc. <sup>16</sup>	7,000	7,000	0	0	*
Arthur E. Geiss <sup>17</sup>	66,306	10,000	0	56,306	*
Albert and Hiedi Gentile, JTWROS <sup>18</sup>	10,000	10,000	0	0	*
Greenstone, LLC <sup>19</sup>	381,921	31,250	0	350,671	2.17%
Hare & Co LLC <sup>20</sup>	475,000	475,000	0	0	*
Daniel W. and Allaire Hummel, JTWROS <sup>21</sup>	34,000	17,000	0	17,000	*
Morgan Janssen <sup>22</sup> **	1,500	0	1,500	0	*
Peter K. Janssen <sup>23</sup> **	17,469	3,125	14,344	0	*
Peter W. Janssen	31,250	31,250	0	0	*
John S. Lemak <sup>24</sup> **	132,800	0	2,800	130,000	*
John S. Lemak IRA					
Texas Capital Bank, Custodian <sup>25</sup>	130,000	50,000	0	80,000	*
Robert Littera	6,250	6,250	0	0	*
Mark E. and Jill K. McDowell, JTWROS <sup>26</sup> Thomas A. McGurk	15,000 17,000	15,000	0	0	*
Jeffrey McMahon <sup>27</sup>	541,888	5,000 35,000		12,000 506,888	3.14%
Monoc Capital Ltd. <sup>28</sup>			0	0	0
Jerry D. Neal <sup>29</sup>	15,625 357,000	15,625 125,000	0	232,000	1.44%
Northland Securities, Inc. <sup>30</sup> ***	69,378	0	34,375	35,003	1.4470
OPES EQUITIES INC. <sup>31</sup>	4,690	4,690	0	0	*
Cindy C. Payne <sup>32</sup>	184,375	9,375	0	175,000	1.08%
Jeff Peterson <sup>33</sup> **	31,190	9,373	17,188	14,002	1.08%
Robert B. Prag <sup>34</sup>	309,000	100,000	0	209,000	1.29%
Stephen Renaud** <sup>35</sup>					
Daniel Salvas	392,546 65,625	10,000 15,625	25,500 0	357,046 50,000	2.21%
Joseph Schump	18,750	18,750	0	0	*
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Selling Stockholder	Shares of Common Stock Beneficially Owned Prior to this Offering	Shares of Common Stock owned Prior to this Offering and Registered hereby	Shares issuable upon Exercise of Warrants owned Prior to this Offering and Registered hereby	Shares of Common Stock Beneficially Owned Upon Completion of this Offering <sup>1</sup>	Percentage of Common Stock Beneficially Owned Upon Completion of this Offering <sup>2</sup>
Jeffrey Shealy <sup>36</sup>	3,486,586	93,750	0	3,392,836	21.00%
Michael Silverman** <sup>37</sup>	263,213	0	33,679	229,534	1.42%
William N. Strawbridge	30,690	16,000	0	14,690	*
Clayton A. Struve	96,000	30,000	0	66,000	*
The Del Mar Consulting Group, Inc. <sup>38</sup>	174,000	174,000	0	0	*
Thornaby Limited <sup>39</sup>	51,667	35,000	0	16,667	*
Mark Tompkins <sup>40</sup>	2,385,706	250,000	0	2,135,706	13.22%
Vicap Ltd. <sup>41</sup>	15,625	15,625	0	0	*
John V. Wagner, Jr.	36,000	16,000	0	20,000	*
Jeffrey Wilfong	64,000	36,000	0	28,000	*
Thomas Zahavi	89,700	20,000	0	69,700	*
Michael A. Zimmerman	5,000	5,000	0	0.	*
Total <sup>42</sup>	11,271,303	2,189,142	153,714	8,928,447	

n

\* Less than 1%

\*\* Affiliate of registered broker-dealer

\*\*\* Registered broker-dealer

- (1) Assumes all of the shares of Common Stock to be registered on the registration statement of which this prospectus is a part, including all shares of Common Stock underlying Common Stock purchase warrants held by the selling stockholders, are sold in the offering and that shares of Common Stock beneficially owned by such selling stockholder but not being registered by this prospectus (if any) are not sold.
- (2) Percentages are based on the 16,158,981 shares of Common Stock issued and outstanding as of the Determination Date.
- (3) David M. Aichele is Vice President of Business Development of the Company. Includes 130,000 shares subject to a repurchase option.
- (4) Scott Wilfong is the President of Alex Partners, LLC and may be deemed to have voting and investment power over the shares held thereby. Includes 116,000 shares issued to Alex Partners, LLC in connection with a consulting agreement with the Company.
- (5) Includes shares held in a joint tenant account over which Phillip Alexander has equal voting and investment power with his wife, Labinda B Alexander.

- (6) Includes 700 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (7) Includes 8,594 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (8) Jonathan and Gina Blatt are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (9) Christopher and Denise Blum are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (10) Mark D. Boomgarden is Vice President of Operations of the Company. Includes 175,682 shares subject to a repurchase option.
- (11) Includes 19,095 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (12) Shaye Hirsch is Director of Brio Capital Master Fund Ltd. and may be deemed to have voting and investment control over the shares held thereby.
- (13) Lee and Nancy Corbin are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (14) Kevin and Sara Drehmer are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (15) Barbara J. Glenns has the power to vote and dispose of the shares being registered on behalf of EFD Capital, Inc. Includes 34,296 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (16) Roman Ryzhkov is President of F&M Star Alliance Inc. and may be deemed to have voting and investment power over the shares held thereby.
- (17) Arthur Geiss is a Director of the Company and also provides consulting services to the Company through his company, AEG Consulting LLC. Includes 10,000 shares of Common Stock issuable upon exercise of an option that vested in May 2016 and is exercisable until May 22, 2025 and 32,837 shares subject to a repurchase agreement.
- (18) Albert and Hiedi Gentile are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (19) David Ngo is the Managing Member of Greenstone, LLC and may be deemed to have voting and investment power over the shares held thereby.
- (20) Katherine Potts is the Manager of Herald Investment Trust Plc, the beneficial owner of Hare & Co LLC, and may be deemed to have voting and investment power over the shares held thereby.

- (21) Daniel and Allaire Hummel are joint tenants with a right of survivorship and have equal voting and investment power over shares held thereby.
- (22) Includes 1,500 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (23) Includes 14,344 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (24) Includes shares held by John S. Lemak IRA Texas Capital Bank, Custodian. Includes 2,800 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (25) John Lemak is the Trustee of John S. Lemak IRA and may be deemed to have voting and investment power over the shares held thereby.
- (26) Mark and Jill McDowell are joint tenants with a right of survivorship and have equal voting and investment power over the shares held thereby.
- (27) Jeffrey McMahon is a Director of the Company. Includes 10,000 shares of Common Stock issuable upon exercise of an option that vested in May 2016 and is exercisable until May 22, 2025. Includes 22,000 shares subject to a repurchase option.
- (28) Andrew Haughian is President of Monoc Capital Ltd. and may be deemed to have voting and investment power over the shares held thereby.
- (29) Jerry Neal is a Director of the Company. Includes 10,000 shares of Common Stock issuable upon exercise of an option that vested in May 2016 and is exercisable until May 22, 2025 and 22,000 shares subject to a repurchase agreement.
- (30) Jeffrey Peterson is the Head of Investment Banking at Northland Securities, Inc. and may be deemed to have voting and investment control over the shares held thereby. Northland Securities, Inc. acted as a placement agent in the First 2016 Offering and in the 2015 Offering (as defined below under "Description of Business The 2015 Offering"). Includes 69,738 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (31) Ilario Licul is the President of OPES EQUITIES INC. and may be deemed to have voting and investment power over the shares held thereby.
- (32) Cindy Payne is Chief Financial Officer of the Company. Includes 175,000 shares subject to a repurchase option.

- (33) Includes 31,190 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (34) Includes 174,000 shares held by The Del Mar Consulting Group, Inc. over which Mr. Prag has voting and investment control.
- (35) Includes 129,997 shares of common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (36) Jeffrey Shealy is Chief Executive Officer and a Director of the Company. Includes 36,000 shares subject to the repurchase option.
- (37) Includes 138,176 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.
- (38) Robert Prag is the President of The Del Mar Consulting Group, Inc. and may be deemed to have voting and investment power over the shares held thereby. The Del Mar Consulting Group, Inc. serves as a consultant to the Company from time to time.
- (39) Nicholas Pitalugu is the Director of Trilex Limited, the Corporate Director of Thornaby Limited, and may be deemed to have voting and investment power over the shares held thereby.
- (40) Mark Tompkins beneficially owns approximately 14.8% of our issued and outstanding shares of Common Stock.
- (41) Chris Erickson is the Director of Vicap Ltd. and may be deemed to have voting and investment power over the shares held thereby.
- (42) Includes 450,430 shares of Common Stock issuable upon exercise of warrants currently exercisable or exercisable within 60 days.

# **USE OF PROCEEDS**

We will not receive proceeds from sales of Common Stock made under this prospectus.

# **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.

# MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

#### **Market Information and Holders**

Our Common Stock is currently quoted on the OTC Market (OTCQB) under the symbol "AKTS." Prior to May 1, 2015, our Common Stock was quoted under the symbol "DNLX." Quotations of our Common Stock began on May 28, 2015. There has been very limited trading in our Common Stock to date.

As of December 12, 2016, we had 16,158,981 shares of our Common Stock issued and outstanding held by approximately 120 stockholders of record. To date, we have not paid dividends on our Common Stock.

The following table sets forth the high and low closing bid prices for our Common Stock for the fiscal quarter indicated as reported on OTC Markets. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions. Our Common Stock is very thinly traded and, thus, pricing of our Common Stock on OTC Markets does not necessarily represent its fair market value.

Period	E	ligh	Low
	•		2.00
Quarter ended June 30, 2015 (from May 28, 2015)	\$	7.00 \$	3.00
Quarter ended September 30, 2015		5.00	2.75
Quarter ended December 31, 2015		4.15	1.55
Quarter ended March 31, 2016		2.00	1.50
Quarter ended June 30, 2016		4.40	1.90
Quarter ended September 30, 2016		4.49	3.50
Quarter ended December 31, 2016 (through December 12, 2016)		6.00	4.10

### Dividends

We have never paid any cash dividends on our capital stock and do not anticipate paying any cash dividends on our Common Stock in the foreseeable future. We intend to retain future earnings to fund ongoing operations and future capital requirements. Any future determination to pay cash dividends will be at the discretion of our Board of Directors and will be dependent upon financial condition, results of operations, capital requirements and such other factors as the Board of Directors deems relevant.



## Warrants and Options

As of December 12, 2016 we had outstanding warrants and options to purchase 471,697 and 160,000 shares of our Common Stock, respectively.

#### Securities Authorized for Issuance under Equity Compensation Plans

The following table provides information as of June 30, 2016, with respect to the shares of Common Stock that could have been issued under our equity compensation plans as of such date:

# **Equity Compensation Plan Information**

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	securities to be exercise price fut sued upon exercise of outstanding equ of outstanding options, j options, warrants warrants and sec	
	(a)	(b)	(c)
Equity compensation plans approved by security holders	160,000(1)	\$ 1.50	608,902(2)
Equity compensation plans not approved by security holders	-	-	-
Total	160,000(1)		608,902(2)

- (1) The 160,000 shares of Common Stock to be issued upon the exercise of outstanding options are issuable under the 2015 Equity Incentive Plan (the "2015 Plan").
- (2) As of June 30, 2016, 600,800 additional shares of Common Stock remained available for future issuance under the 2015 Plan, and approximately 8,201 post-Merger shares of Common Stock (as adjusted to reflect the 324.082 Merger conversion ratio) remained available for future issuance under the 2014 Stock Plan (the "2014 Plan").

On December 15, 2016, our stockholders approved the 2016 Stock Incentive Plan (the "2016 Plan"), which reserves 3,000,000 shares of our Common Stock, plus any shares subject to outstanding awards granted under the 2015 Plan, for issuance under the 2016 Plan. Accordingly, we will no longer grant awards under the 2014 Plan or the 2015 Plan, although awards that are outstanding under such plans will continue in accordance with their terms.



## **Other Convertible Securities**

As of the date hereof, other than the securities described above, the Company does not have any outstanding convertible securities.

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis should be read in conjunction with the historical financial statements and the related notes thereto contained in this prospectus. The management's discussion and analysis contains forward-looking statements, such as statements of our plans, objectives, expectations and intentions. Any statements that are not statements of historical fact are forwardlooking statements. When used, the words "believe," "plan," "intend," "anticipate," "target," "estimate," "expect" and the like, and/or future tense or conditional constructions ("will," "may," "could," "should," etc.), or similar expressions, identify certain of these forward-looking statements. These forward-looking statements are subject to risks and uncertainties, including those under "Risk Factors" in this prospectus that could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. The Company's actual results and the timing of events could differ materially from those anticipated in these forward-looking statements as a result of several factors. Except as required by law, the Company does not undertake any obligation to update forwardlooking statements to reflect events or circumstances occurring after the date of this prospectus.

As the result of the Merger and the change in business and operations of the Company, a discussion of the past financial results of the Company prior to the Merger is not pertinent, and under applicable accounting principles, the historical financial results of Akoustis, Inc., the accounting acquirer, prior to the Merger are considered the historical financial results of the Company.

On August 11, 2016, our Board of Directors adopted a change in our fiscal year end from March 31 of each year to June 30 of each year, effective immediately. The financial statements and related discussion and analysis and results of operations included in this prospectus cover the three-month transition period from April 1, 2016 to June 30, 2016, the years ended June 30, 2016 and 2015 (to conform to our new fiscal year), the year ended March 31, 2016 (our prior fiscal year), and the period from May 12, 2014 (inception) through March 31, 2015. Such discussion highlights the results of operations and the principal factors that have affected our financial condition, as well as our liquidity and capital resources for the periods described, and provides information that management believes is relevant for an assessment and understanding of the statements of financial condition and results of operations presented herein. You should read the discussion and analysis together with such financial statements and the related notes thereto.

## Overview

Akoustis is an early-stage company that designs and manufactures innovative radio frequency (RF) filters enabling the RF front-end (RFFE) of Mobile Wireless devices, such as smartphones and tablets. Located between the device's antenna and its digital backend, the RFFE is the circuitry that performs the analog signal processing and contains components such as amplifiers, filters and switches. To construct the resonators that are the building blocks for the RF filter, we have developed a fundamentally new single-crystal acoustic materials and device technology that we refer to as BulkONE. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RFFE.



We believe owning the core resonator technology and manufacturing our designs is the most direct and effective means of delivering our solutions to the market. Furthermore, our technology is based upon bulk-mode resonance, which is superior to surface-mode resonance for high band applications and emerging 4G/LTE and WiFi frequency bands. While our target customers utilize or make the RFFE module, several customers lack access to critical high band technology to compete in high band applications and other traditional surface-mode solutions where higher power performance is required. We intend to design and manufacture our RF filter products to multiple mobile phone OEM customers and enable broader competition among the front-end module manufacturers. We plan to operate as a "pure-play" RF filter supplier and align with the front-end module manufacturers who seek to acquire high performance filters to grow their module business.

We have built prototype resonators using our proprietary single-crystal materials. We are currently optimizing our BulkONE technology with our wafer-manufacturing partner under a joint development agreement (JDA) and a manufacturing agreement. We leverage both federal and state level, non-dilutive research and development ("R&D") grants to support development and commercialization of our technology. We are developing resonators for 4G/LTE and WiFi bands and the associated proprietary models and design kits required to design our RF filters. Once we have stabilized the wafer process technology, we plan to engage with strategic customers to evaluate first our resonators and then our filter prototypes. Our initial designs will target high band 4G/LTE and WiFi frequency bands. Since Akoustis owns its core technology and controls access to its IP, we can offer several ways to engage with potential customers. First, we can engage with the mobile wireless market, providing filters that we design and offer as a standard catalog component to multiple customers. Second, we can start with a customer-supplied filter specification, which we design and fabricate for a specific customer. Finally, we can offer our models and design kits for our customers to design their own filter into our proprietary technology.

We have earned no revenue from operations since inception, and our operations have been funded with capital contributions, grants and debt. We have incurred losses totaling approximately \$8.7 million from inception through September 30, 2016. These losses are primarily the result of material and material processing costs associated with developing and commercializing our technology as well as personnel costs, including stock-based compensation, professional fees, primarily accounting and legal, cost of D&O insurance and losses due to the change in the fair value of derivatives. We expect to continue to incur substantial costs for commercialization of our technology on a continuous basis because our business model involves materials and solid state device technology development as well as engineering of catalog and custom filter designs.

## Plan of Operation

We plan to commercialize our technology by designing and manufacturing single band and multi-band BAW filter solutions that address problems (such as loss, bandwidth, power handling and isolation) created by the growing number of frequency bands in the RFFE of mobile devices to support 4G/LTE and WiFi. First, we plan to prototype, by the end of 2016, our first series of single-band low-loss BAW filter designs for 4G/LTE frequency bands, which are dominated by higher loss BAW solutions and cannot be addressed with low band, lower power handling SAW technology. Second, we plan to develop, by early 2017, a series of filter solutions that can cover multiple frequency bands. In order to succeed, we must convince mobile phone OEMs and RFFE module manufactures to use our BulkONE technology in their modules. However, since there are only two dominant BAW filter suppliers in the industry that have high band technology, and both utilize such technology as a competitive advantage at the module level, we expect customers that lack access to high band filter technology will be open to engage with our pure-play filter company.

We have successfully transferred our BulkONE wafer process to our manufacturing partner, Global Communications Semiconductor. The BulkONE process uses a range of single-crystal group III-nitride piezoelectric materials, which were fabricated into BAW resonators and characterized at cellular communication frequencies to determine their bandwidth. On May 23, 2016, we announced an experimental, 3.4 GHz BAW two-port series-configured resonator device with a high K-squared of 12.5%, which was modeled near resonance frequency and was constructed from single crystal undoped aluminum nitride (AlN) material. On November 1, 2016, we announced improvements to our single-crystal BAW resonator design and process technology to achieve a quality factor (Q) of 2914, which is suitable for BAW RF filters targeting 4G/LTE, WIFI and emerging 5G and other wireless applications. These resonators, which are the core building blocks enabling BAW RF filters, were fabricated using our patented BulkONE process. Our technology development efforts continue to focus on wafer and process optimization, specifically, through targeted activities for Q-factor improvements.

Once we complete customer validation of our technology, we expect to complete qualification of our BulkONE process technology in the first half of 2017 to support a product family of 4G/LTE filter solutions. Once we have stabilized our process technology in a manufacturing environment, we will complete a production release of our high-band filter products in the frequency range from 1.5GHz to 4.0GHz. The target frequency bands will be prioritized based upon customer priority. We expect this will require recruiting and hiring additional personnel.

In August 2016, we signed multiple non-exclusive collaborative business agreements with a Chinese tier one RFFE module manufacturer to supply its premium RF filter products, as well an agreement with a distributor who will be responsible for global promotion and selling of our filter products. We will continue discussions with additional prospective customers, although these discussions may not result in any agreements. We expect to proceed with our plan to develop a family of standard catalog filter designs regardless of the outcome of these discussions.

We plan to pursue filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners. These types of arrangements may subsidize technology development costs and qualification, filter design costs, as well as offer complementary technology and market intelligence and other avenues to revenue. However, we intend to retain ownership of our core technology, IP, designs and related improvements. We expect to pursue development of catalog designs for multiple customers, and offer such catalog products in multiple sales channels.

As of December 12, 2016, we had approximately \$3.8 million of cash and cash equivalents to fund our business and product development, to commercialize our technology, research and development, the development of our patent strategy and expansion of our patent portfolio, as well as for working capital and other general corporate purposes. These funds are expected to be sufficient to fund our activities through June 30, 2017. Our anticipated expenses include employee salaries and benefits, compensation paid to consultants, capital costs for research and other equipment, costs associated with development activities including travel and administration, legal expenses, sales and marketing costs, general and administrative expenses, and other costs associated with an early stage, public technology company. We anticipate increasing the number of employees to approximately 20 to 25 employees; however, this is highly dependent on the nature of our development efforts and our success in commercialization. We anticipate adding employees for research and development, as well as general and administrative functions, to support our efforts. We expect to incur consulting expenses related to technology development and other efforts as well as legal and related expenses to protect our intellectual property. We expect capital expenditures from cash currently investigating the feasibility of using equipment leases or government grants to fund the purchase of the equipment. The amounts we actually spend for any specific purpose may vary significantly and will depend on a number of factors including, but not limited to, the pace of progress of our commercialization and development efforts, actual needs with respect to product testing, development and research, market conditions, and changes in or revisions to our marketing strategies. We have significant discretion in the use of our cash assets.

Commercial development of new technology is, by its nature, unpredictable. Although we will undertake development efforts with commercially reasonable diligence, there can be no assurance that our current cash position will be sufficient to enable us to commercialize our technology to the extent needed to create future sales to sustain operations as contemplated herein. If our current cash is insufficient for these purposes, or the Company does not receive research grants or such grant payments are delayed, or the Company experiences costs in excess of estimates to continue its research and development plan, it is possible that the Company would not have sufficient resources to continue as a going concern for the next year, and we will consider other options to continue our path to commercialization, including, but not limited to, additional financing through follow-on stock offerings, debt financing, co-development agreements, curtailment of operations, suspension of operations, sale or licensing of developed intellectual or other property, or other alternatives.

If we are unable to raise the funds that we believe are needed to develop our technology and enable future sales, we may be required to scale back our development plans by reducing expenditures for employees, consultants, business development and marketing efforts, and other projected expenditures. This could reduce our ability to commercialize our technology or require us to seek further funding on less favorable terms than if we had raised the full amount of any required funds.

We cannot guarantee that our technology will be accepted, that we will ever earn revenues sufficient to support our operations or that we will ever be profitable. Furthermore, since we have no committed source of financing, we cannot guarantee that we will be able to raise money as and when we need it to continue our operations. If we cannot raise funds as and when we need them, we may be required to severely curtail, or even to cease, our operations.

### **Critical Accounting Policies**

The following discussion and analysis are based on the financial statements contained in this prospectus, which we have prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP"). Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, our management uses its judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate.

### Derivative Liability

The Company evaluates its convertible debt, options, warrants and other contracts, if any, to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted for in accordance with paragraph 815-10-05-4 and Section 815-40-25 of the FASB Accounting Standards Codification. The result of this accounting treatment is that the fair value of the embedded derivative is marked-to-market each balance sheet date and recorded as either an asset or a liability. The change in fair value is recorded in the consolidated statement of operations as other income or expense. Upon conversion, exercise or cancellation of a derivative instrument, the instrument is marked to fair value at the date of conversion, exercise or cancellation and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within 12 months of the balance sheet date.



The Company adopted Section 815-40-15 of the FASB Accounting Standards Codification ("Section 815-40-15") to determine whether an instrument (or an embedded feature) is indexed to the Company's own stock. Section 815-40-15 provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions.

The Company utilizes a binomial option pricing model to compute the fair value of the derivative and to mark to market the fair value of the derivative at each balance sheet date. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

## Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts payable, accrued expenses, and convertible notes payable approximate fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities based on the guidance of ASC 820, "Fair Value Measurements and Disclosures," which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

Fair value measurements are categorized using a valuation hierarchy for disclosure of the inputs used to measure fair value, which prioritize the inputs into three broad levels:

Level 1 - Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 - Pricing inputs are other than quoted prices in active markets included in level 1, which are either directly or indirectly observable as of the reported date, and include those financial instruments that are valued using models or other valuation methodologies.

Level 3 - Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value.

### Equity-based compensation

The Company recognizes compensation expense for all equity-based payments in accordance with ASC 718 "*Compensation – Stock Compensation*". Under fair value recognition provisions, the Company recognizes equity-based compensation net of an estimated forfeiture rate and recognizes compensation cost only for those shares expected to vest over the requisite service period of the award.

Restricted stock awards are granted at the discretion of the Company. These awards are restricted as to the transfer of ownership and generally vest over the requisite service periods, typically over a five-year period (vesting on a straight-line basis). The fair value of a stock award is equal to the fair market value of a share of Company stock on the grant date.

The fair value of an option award is estimated on the date of grant using the Black–Scholes option valuation model. The Black–Scholes option valuation model requires the development of assumptions that are inputs into the model. These assumptions are the value of the underlying share, the expected stock volatility, the risk–free interest rate, the expected life of the option, the dividend yield on the underlying stock and the expected forfeiture rate. Expected volatility is benchmarked against similar companies in a similar industry over the expected option life and other appropriate factors. Risk–free interest rates are calculated based on continuously compounded risk–free rates for the appropriate term. The dividend yield is assumed to be zero as the Company has never paid or declared any cash dividends on its Common Stock and does not intend to pay dividends on its Common Stock in the foreseeable future. The expected forfeiture rate is estimated based on management's best estimate.

Determining the appropriate fair value model and calculating the fair value of equity-based payment awards requires the input of the subjective assumptions described above. The assumptions used in calculating the fair value of equity-based payment awards represent management's best estimates, which involve inherent uncertainties and the application of management's judgment. As a result, if factors change and the Company uses different assumptions, our equity-based compensation could be materially different in the future. In addition, the Company is required to estimate the expected forfeiture rate and recognize expense only for those shares expected to vest. If the Company's actual forfeiture rate is materially different from its estimate, the equity-based compensation could be significantly different from what the Company has recorded in the current period.

The Company accounts for share-based payments granted to non-employees in accordance with ASC 505-40, "*Equity Based Payments to Non-Employees*". The Company determines the fair value of the stock-based payment as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. If the fair value of the equity instruments issued is used, it is measured using the stock price and other measurement assumptions as of the earlier of either (1) the date at which a commitment for performance by the counterparty to earn the equity instruments is reached, or (2) the date at which the counterparty's performance is complete. The fair value of the equity instruments is re-measured each reporting period over the requisite service period.

#### **Results of Operations**

Our results of operations are presented for the three months ended September 30, 2016 compared to the three months ended September 30, 2015, and for the three-month transition period ended June 30, 2016, the year ended June 30, 2016, the year ended June 30, 2015, our prior fiscal year ended March 31, 2016, and the period from May 12, 2014 (inception) through March 31, 2015.

# Three Months Ended September 30, 2016 Compared to Three Months Ended September 30, 2015

#### <u>Revenue</u>

The Company did not have any revenues from operations during the three months ended September 30, 2016 and the three months ended September 30, 2015.

#### <u>Expenses</u>

## Research and Development Expenses

Research and Development expenses were \$652,576 for the three months ended September 30, 2016, an increase of \$330,856, or 102.8%, over \$321,720 for the three months ended September 30, 2015. The increase was primarily associated with salaries and benefits, which increased by \$87,945, or 51.7%, due to the addition of headcount. In addition, stock-based compensation increased by \$196,255 (compared to \$0 in the 2015 period), due to the grant of restricted stock awards to employees and contractors. In addition, we recorded an increase in material spend of \$24,838, or 23.4%, due to higher purchases of R&D raw materials and an increase in spend of \$26,766 (compared to \$0 in the 2015 period) for costs associated with the extension of a license agreement.

#### General and Administrative Expenses

General and Administrative expenses for the three months ended September 30, 2016 were \$1,263,243, as compared to \$761,323 for the three months ended September 30, 2015, an increase of \$501,920, or 65.9%. The increase occurred mainly in stock-based compensation, which increased by \$442,240, or 672.9%, over the \$65,725 recorded for the three months ended September 30, 2015. The increase was driven by new restricted stock awards granted to employees and consultants during the three months ended September 30, 2016. We recorded professional fees, mainly accounting and legal, of \$266,572, as compared to \$205,334 for the three months ended September 30, 2015, an increase of \$61,238, or 29.8%.

#### Other Income and Expense

Other Income and Expense for the three months ended September 30, 2016 was comprised mainly of a loss for the change in fair value of derivatives of \$157,216, which was \$171,231 higher compared to the three months ended September 30, 2015. The loss was due to the change in the valuation price of \$1.50 used as of September 30, 2015 to the closing price per common share on September 30, 2016 of \$4.28.



## Net Loss

Net Loss was \$2,072,945 for the quarter ended September 30, 2016, compared to a net loss of \$1,068,532 for the three months ended September 30, 2015. The quarter over quarter increase in loss of \$1,004,413, or 94.0%, was mainly driven by higher stock-based compensation expense for both R&D and G&A of \$196,255 and \$442,240, respectively, the higher loss recorded for the change in fair value of derivatives of \$171,271, a higher R&D material spend of \$24,848, higher R&D license fees of \$26,766 and higher professional fees of \$61,238.

## Three-Month Transition Period Ended June 30, 2016 Compared to Three-Month Period Ended June 30, 2015

#### <u>Revenue</u>

The Company did not have any revenues from operations during the three months ended June 30, 2016 and the three months ended June 30, 2015.

## Expenses

### Research and Development Expenses

Research and Development expenses consist of costs for technical and engineering personnel, travel expense for R&D personnel and costs to develop and commercialize our technology including materials, material processing, and contractors. Research and Development expenses were \$709,314 for the three-month transition period ended June 30, 2016 and were \$481,189, or 210.9%, higher than the three-months ended June 30, 2015. The period over period increase was due to the ramp up of research and development activity in the Company's second year of operations. The increased expenditures occurred primarily in areas of R&D personnel, stock based compensation, and material costs. Personnel costs increased by \$247,490 versus \$0 in the comparative period due to the technical and engineering new hires. Stock-based compensation of \$75,686 increased by \$38,774, or 105.0%, over the three-month comparative period due to new restricted stock awards made to technical and engineering contractors and the calculation of the change in the fair market value of awards made in prior periods. In addition, material and material processing costs for the transition period were \$320,204 and were \$163,314, or 104.1%, higher than the comparative period due to the ramp up of material purchases and material processing costs for product development activities.

# General and Administrative Expenses

General and Administrative costs include salaries and wages for executive and administrative staff, stock-based compensation, professional fees, insurance costs and other general costs associated with the administration of our business. General and Administrative expenses for the three-month transition period ended June 30, 2016 were \$968,734 versus \$625,917 for the 2015 comparative period. The increase of \$342,817, or 54.8%, was associated with increases in personnel costs, professional fees, insurance expense, stock-based compensation and travel. Personnel costs of \$330,436 were higher by \$92,484, or 38.9%, due to the increase in the number of administrative personnel, while professional fees of \$125,322, associated with legal, accounting and investor relations, were higher by \$22,519, or 21.9%, as a result of the Company becoming a public reporting company in May 2015. Insurance expense of \$42,698, which includes coverage for Directors and Officers, Keyman and Property & Casualty, was higher by \$24,685, or 137.0%, due to the higher cost of Directors and Officers ("D&O") coverage which was not in place for the full three-month 2015 comparative period. Stock-based compensation for the transition period was \$359,956 and higher by \$171,208 or 90.7% as a result of the issuance of new awards for G&A personnel executed after June 2015 and the change in the fair market value of stock grants issued to consultants in the three-month comparative period (change from \$1.50 per common share to \$4.19 per common share as of June 30, 2016). Travel expense for the transition period of \$33,513 increased over the comparative period by \$8,221 or 32.5%, due to more frequent executive travel to meet with potential investors, potential customers and strategic partners.



# Other Income and Expense

Other Expense for the three-month transition period totaled \$839,589 and included a \$860,275 loss on fair value of derivatives associated with the change in fair market value of warrants issued in the "2015 Offering" (as defined below under "Description of Business — The 2015 Offering"), due to change in stock price per share from \$1.50 per common share to \$4.19 per common share on June 30, 2016. For the three-month 2015 comparative period, we recorded Other Income of \$31,745, consisting primarily of grant income.

#### Net Loss

The Company recorded a net loss of \$2,517,637 for the transition period ended June 30, 2016 compared to a net loss of \$822,297 for the three-months ended June 30, 2015. The year over year incremental loss of \$1,695,340, or 206.2%, was driven by higher material costs due to the ramp up of research and development activities, increased insurance costs and professional fees due to the Company becoming a public reporting company in May 2015 and higher personnel costs for both R&D and Administrative headcount.

## Year Ended June 30, 2016 Compared to Year Ended June 30, 2015

#### <u>Revenue</u>

The Company did not have any revenues from operations during the year ended June 30, 2016 and the year ended June 30, 2015.

### <u>Expenses</u>

### Research and Development Expenses

Research and Development expenses were \$1,758,701 for the year ended June 30, 2016 compared to \$470,987 for the year ended June 30, 2015. The \$1,287,714, or 273.4%, increase occurred primarily in the areas of materials, personnel and stock-based compensation. Materials and material processing costs were \$640,281 for the year ended June 30, 2016 versus \$345,894 for the 2015 comparative period. The increased spend was due to the ramp up of product development activity. Personnel costs were \$716,800 versus \$0 in the 2015 comparative period as a result of the technical and engineering hires made as the Company ramped up operations in its second year. We also saw a year-over-year increase of \$165,825, or 449.2%, in stock based compensation for the year ended June 30, 2016 as a result of the full year effect of restricted stock grants issued in the year ended June 30, 2016 to R&D employees and contractors, as well as the change in the fair market value of grants issued in prior periods.

#### General and Administrative Expenses

General and Administrative expenses for the year ended June 30, 2016 were \$2,935,299 compared to \$920,031 for the year ended June 30, 2015. The increase of \$2,015,268, or 219.0%, was reflected primarily in the following areas: (1) Personnel expense, (2) stock-based compensation, (3) professional fees, (4) insurance, and (5) travel. Personnel costs were \$1,150,362 for the year ended June 30, 2016 and were \$725,509, or 170.8%, higher than the 2015 comparative period. The key driver of the increase was the addition of executive and administrative headcount as the Company added support personnel in its second year. We also saw a year-over-year increase in stock-based compensation of \$451,923, or 231.8%, (\$646,890 for the year ended June 30, 2016 versus \$194,967 for the 2015 comparative period). This increase was due to the costs of new restricted stock awards and the change in the fair market value of grants issued in the 2015 comparative period. We saw a year-over-year increase in professional fees, including legal, accounting/auditing and investor relations, of \$422,820, or 281.9%, over the \$149,999 recorded for the year ended June 30, 2015. In addition, we recorded an increase of \$147,472 in insurance costs, (\$167,990 versus \$20,518 for the 2015 comparative period). The increase in professional fees and insurance are both attributable to the Company becoming a public reporting company in May 2015. Travel expense for the year ended June 30, 2016 was \$136,474 and increased \$100,317 or 277.5%, over the year ended June 30, 2015 as a result of increased executive travel to investor conferences, and meetings with potential customers and strategic partners.

#### Other Income and Expense

Other Income and Expense for the year ended June 30, 2016 included expense of \$968,840 for the loss from the change in the fair value of derivatives. The derivatives are placement agent warrants issued for both the 2015 Offering (as defined below under "Description of Business — The 2015 Offering") and the First 2016 Offering. The expense associated with the change in the fair value was partially offset by grant income of \$254,834. Other Income/Expense for the year ended June 30, 2015 was \$169,245, which consisted of grant income of \$167,499, change in fair value of derivative liabilities of \$1,571 and interest income of \$175.

#### Net Loss

The Company recorded a net loss of \$5,406,167 for the year ended June 30, 2016 compared to a net loss of \$1,221,773 for the year ended June 30, 2015. The incremental loss of \$4,184,394 was due to the ramp up of operations in the Company's second year of operations including higher material and material processing costs, higher R&D and G&A personnel costs, and higher insurance costs and professional fees due to the Company becoming a public reporting company in May 2015.

## Year Ended March 31, 2016 Compared to the Period from May 12, 2014 (Inception) Through March 31, 2015

#### <u>Revenue</u>

The Company did not have any revenues from operations during the year ended March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015.

#### <u>Expenses</u>

### Research and Development Expenses

Research and Development expenses were \$1,222,194 for the year ended March 31, 2016, which was an increase of \$977,559, or 399.6%, over the \$244,635 for the comparative period of May 12, 2014 (inception) to March 31, 2015. The increase was due to the ramp up of research and development activity during the Company's second year of operations. The increased expenditures occurred primarily in areas of R&D personnel costs, stock-based compensation, and material costs. Personnel costs increased by \$469,310 versus \$0 in the comparative period due to new hires of technical and engineering personnel. Stock-based compensation increased \$124,389 over the comparative period due to the issuance of new restricted stock awards made to R&D employees and contractors. In addition, material costs of \$478,858 were \$289,560, or 152.9%, higher in the year ended June 30, 2016 due to the increase in material purchases and material processing costs associated with product development activities.

## General and Administrative Expenses

General and Administrative expenses for the year ended March 31, 2016 were \$2,647,800 versus \$339,214 for the period of May 12, 2014 (inception) to March 31, 2015. The period-over-period increase of \$2,308,586, or 680.6%, was associated with officer and staff personnel costs that were higher by \$852,096, or 441.1%, due to an increase in headcount in the Company's second year of operations. In addition, we incurred professional fees of \$550,300, associated with legal, accounting and investor relations functions, which were higher over the prior year period by \$505,757, or 1135.4%. Insurance expense, primarily driven by the cost of D&O coverage, was higher over the prior year period by \$140,800, or 5620.8%. The increases in both professional fees and D&O insurance were driven by the incremental expenses of the Company becoming a public reporting company in May 2015. Stock-based compensation expense of \$512,594 for the year ended March 31, 2016 was \$509,077, or 14474.8%, higher than the comparative period as a result of the full year effect of expense for agreements executed in the prior year as well as the expense for newly issued grants. Travel expense of \$128,253 also increased over the comparative period by \$116,096, or 955%, due to increased executive travel.

#### Other Income and Expense

Other Income for the year ended March 31, 2016 totaled \$159,167 (versus \$137,500 recorded in the comparative period) and included grant income of \$264,333. The grant income recorded was offset by the loss in fair value of derivatives of \$106,994 on warrants issued in the 2015 Offering (as defined below under "Description of Business — The 2015 Offering") as a result of the change in stock price from \$1.50 to \$2.11, the price per share on the balance sheet date.



## Net Loss

The Company recorded a net loss of \$3,710,827 for the year ended March 31, 2016 and a net loss of \$446,349 for the period from inception month through March 31, 2015. The incremental loss of \$3.26 million, or 731.4%, was driven by higher R&D personnel costs, higher material costs due to the ramp up of research and development activities, increased general and administrative personnel costs due to an increase in support headcount, higher period-over-period stock-based compensation, and increased insurance costs and professional fees due to the Company becoming a public reporting company in May 2015.

### Liquidity and Capital Resources

#### Overview

We have earned no revenue from operations since inception, and our operations have been funded with the capital contributions, private placements of our equity securities, debt financing, and research and development grants.

As of September 30, 2016, we had current assets of \$3,191,551, primarily made up of cash of \$3,054,308. Current liabilities, made up of accounts payable and accrued liabilities, were \$837,116. Working capital as of the quarter ended September 30, 2016 was \$2,354,435. As compared to June 30, 2016, current assets at September 30, 2016 decreased by \$1,062,255, mainly due to the decrease of cash on hand, whereas current liabilities increased by \$293,470 due to higher liabilities associated with trade payables and month-end accruals (higher by \$116,470) and payroll, including the accrual for the restricted stock awards granted in August 2016 (higher by \$172,566).

In February 2016, we were notified that we had been awarded a \$738,000 National Science Foundation ("NSF") Small Business Innovative Research Phase II grant, a two-year program. We expect to apply for additional research and development grants that support technology innovation in line with our business plan. We believe that we have additional opportunities for new grants and matching funds from our current small business program partnership with NSF, including a Phase IIb award, which has a potential \$500,000 award. We expect to receive notification of the Phase IIb award in the second quarter of 2017. There can be no assurance, however, that these grants will be received.

As of December 12, 2016 we have cash on hand of \$3.8 million, which includes the \$1.6 million raised in the Second 2016 Offering (as defined under "Description of Business—The Second 2016 Offering" below). We expect our existing funds will be sufficient to fund our operations through June 30, 2017. As a result, we will need to raise additional capital through the sale of additional equity securities, debt and additional grants, or otherwise, to fund operations past that date. There is no assurance that the Company's projections and estimates are accurate or that the Company will be able to raise the required additional capital on terms favorable to the Company or at all. Although the Company is actively managing and controlling the Company's cash outflows, these matters raise substantial doubt about the Company's ability to continue as a going concern.



### **Cash Flow Analysis**

## Three Months Ended September 30, 2016 Compared to Three Months Ended September 30, 2015

Operating activities used cash of \$1,067,119, for the three months ended September 30, 2016, as compared to \$796,245 for the three months ended September 30, 2015. The net loss of \$2,072,945 for the quarter ended September 30, 2016, offset by non-cash items of stock based compensation of \$704,220, change in the fair value of derivatives of \$157,216, and an increase in trade payables and accrued expenses of \$289,036, comprised the cash used in operating activities for the quarter.

Investing activities used cash of \$34,017 for the three months ended September 30, 2016 due to purchases of machinery and equipment of \$20,293 and cash paid for patents of \$13,724. Investing activities used cash of \$118,830 for the three months ended September 30, 2015 due to purchases of machinery and equipment of \$103,957 and cash paid for patents and trademarks of \$14,873.

There were no cash flows from financing activities for the three months ended September 30, 2016, and 2015.

## Three-Month Transition Period Ended June 30, 2016 Compared to Three Months Ended June 30, 2015

Operating activities used cash of \$1,100,342 in the transition period ended June 30, 2016 and \$576,492 in the three-month 2015 comparative period. The increase in cash used was attributable to the ramp up of the Company's activities in the development and commercialization of its technology (R&D personnel and material costs), higher spend on general and administrative costs for support personnel and higher period-over-period costs for professional fees and D&O insurance.

Investing activities used cash of \$47,215 in the transition period compared to \$23,378 for the 2015 comparative period. The increase in the transition period was the result of additional investments in fixed assets and patents.

Financing activities provided cash of \$2,572,896, which was \$1,668,731 lower than the \$4,241,627 provided in the 2015 comparative period. We held private placement offerings in both three-month periods. The second close of the First 2016 Offering was held during the transition period (April 2016) and provided net proceeds of \$2,562,896, whereas the 2015 Offering (as defined below under "Description of Business — The 2015 Offering"), which closed in the 2015 comparative period (May 2015) provided net proceeds of \$4,241,627.

# Year Ended June 30, 2016 Compared to Year Ended June 30, 2015

Operating activities used cash of \$3,312,969 during the year ended June 30, 2016 and \$980,044 for the 2015 comparative period. The yearover-year increase in use of cash of \$2,332,925 was attributable to higher operating expenses associated with the ramp up of development and commercialization activities (primarily R&D personnel and material costs), higher spend on G&A costs for support personnel, professional fees and D&O Insurance.

Investing activities used cash of \$203,667 compared to \$111,727 for the comparative year ended June 30, 2015 primarily due to the increased spend on R&D equipment (higher by \$79,897).

Financing activities provided cash of \$3,342,584 for the year ended June 30, 2016 versus \$4,931,627 for the 2015 comparative period. The year-over-year decrease in cash from financing activities is the primary difference between the net proceeds of the First 2016 Offering of \$3,332,584 (closings held in March and April of 2016) as compared to the net proceeds of the 2015 Offering (as defined below under "Description of Business — The 2015 Offering") of \$4,241,627 (held in May and June 2015) and the conversion of \$655,000 of convertible notes to stock in May 2015.

# Year Ended March 31, 2016 Compared to the Period from May 14, 2014 (Inception) Through March 31, 2015

Operating activities used cash of \$2,789,118 for the year ended March 31, 2016 and \$433,065 for the comparative period of May 12, 2014 (inception) to March 31, 2015. The higher use of cash was due to the ramp up of the Company's activities in the development and commercialization of its technology (R&D personnel and material costs), higher spend on administrative personnel and increased costs for professional fees and D&O Insurance as the result of the company becoming a public reporting company in May 2015.

Investing activities used cash of \$179,830 in the year ended June 30, 2016 versus \$99,197 for the comparative period. The period-overperiod increase of \$80,633 was due primarily to increased investment in R&D equipment (higher by \$72,246).

Financing activities provided cash of \$5,011,314 during the year ended March 31, 2016, which was \$3,791,313 higher than provided in the comparative period ended March 31, 2015. The cash provided during the year ended March 31, 2016 was the result of net proceeds of the first closing of the First 2016 Offering, held March 2016, as well as the net proceeds from the first and second closings of the 2015 Offering (as defined below under "Description of Business — The 2015 Offering"), held in May and June 2015. The Company raised \$1,220,001 in the comparative period, which was prior to the Merger in May 2015, through the sale of preferred stock (\$530,000) and the issuance of convertible notes for \$655,000.

# **Off-Balance Sheet Transactions**

The Company did not engage in any "off-balance sheet arrangements" (as that term is defined in Item 303(a)(4)(ii) of Regulation S-K) as of September 30, 2016.



# **DESCRIPTION OF BUSINESS**

# 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 fundamentally new piezoelectric resonator technology that we call BulkONE <sup>TM</sup> 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. Filters are a critical component of the RF front-end (RFFE), and their use has multiplied with the launch and licensing of 4G/LTE frequency bands. They are used to define the range of frequencies of radio signals that are transmitted (the "passband") and simultaneously reject unwanted signals. The increasing demand for wireless data and user applications is driving an increase in the number of wireless channels or frequency bands in a single device. Each new band introduced creates an increase in a demand for filters. A high-end smartphone, for example, must filter the transmit and receive paths for 2G, 3G and 4G wireless access methods in up to 15 bands, as well as Wi-Fi, Bluetooth and in some cases GPS. Signals in the receive paths must be isolated from one another. The filters also must reject other extraneous signals from numerous sources. The current approach to RF filter manufacturing utilizes thin-film polycrystalline materials (thin-film bulk acoustic resonators, or "FBARs") with relatively high resistance that dissipate a significant amount of the energy in the signal (referred to as "lossy"), resulting in front-end heat generation and reduced battery life. In order to compensate for such losses, the power amplifier specifications are increased, by as much as a factor of two, which reduces further the battery life and puts more demands on the thermal management of the mobile device.

As the filter count per mobile device increases, these inefficiencies will become more limiting. We plan to use single crystal piezoelectric materials to develop a new class of RF filters with a fundamental advantage to reduce losses over existing thin film technologies. Our technology has not yet obtained market validation from Tier I mobile wireless customers or been verified in commercial manufacturing and our RF filters have yet to generate any sales. We have incurred accumulated losses from our inception through September 30, 2016 of \$8.7 million. We have fabricated research and development ("R&D") resonators demonstrating the feasibility of our BulkONE technology, and have transitioned the technology into a production-capable wafer fabrication facility.

Once our technology is qualified for manufacturing, we expect to design and sell single crystal BAW RF filter products using our BulkONE technology. We believe our technology is disruptive to the RF front-end (RFFE) market through the following expected advantages:

- · Wider Bandwidth Coverage,
- · 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 BulkONE technology is qualified for production, our product focus is on innovative single-band filter products for the growing RFFE market, which can be used to make duplexer or multiplexer filter products necessary for the mobile Internet. These products present the greatest near-term potential for commercialization of our technology. According to a McKinsey Global Institute report dated May 2013, the Mobile Internet, the so-called "Internet of Things" (IoT), as well as advanced materials including piezoelectric ceramics and crystals are included in the twelve potentially economically disruptive technologies with an estimated economic value impact that could be over \$25 trillion.

In early 2015, we signed a joint development agreement and supply agreement with a foundry partner, and since that time, we have transferred our R&D resonator process flow to this partner and have evaluated single crystal piezoelectric materials ranging from Aluminum Gallium Nitride (AlGaN) to Aluminum Nitride (AlN) to determine the material with the highest performance potential. During the past year, Akoustis has evaluated single crystal group-III element nitride piezoelectric materials from at least six suppliers. In August of 2016, the Company announced it had signed multiple non-exclusive collaborative business agreements with a Chinese tier one RF front-end ("RFFE") module manufacturer to supply its premium RF filter products. The agreements signed between the Company and its tier one collaborator include a Joint Development Agreement (JDA), a Statement of Work (SOW), and a strategic Product Supply Agreement (PSA). In addition, we have signed an agreement with a distributor who will be responsible for global promotion and selling of our filter products. We will continue discussions with additional prospective customers, although these discussions may not result in any agreements.

Regarding technical performance, Akoustis achieved an experimental, two-port series-configured resonator configured with on-chip passive elements with K-squared of 12.5% for undoped single crystal AIN, approximately two-times higher than incumbent polycrystalline, undoped AIN. K-squared is the electromechanical coupling factor that determines the effective bandwidth of a filter. We are currently focused on improving the accuracy of our library models as well as increasing the quality factor (Q) of our resonator. We have demonstrated a Q of up to 2090 for our fabricated resonators, which is suitable for BAW RF filters targeting 4G/LTE WiFi mobile wireless applications, but we continue to improve design and process to achieve a Q of greater than 2500 as our next milestone. We expect significant progress toward this goal over the coming months. As we transition to production, we expect to optimize our process for the best combination of K-squared and Q.

# 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.



#### AlGaN — Aluminum Gallium Nitride

AIN — 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.
- **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.
- **Group III element nitrides** a dielectric material comprised of group IIIA element, such as boron (B), aluminum (Al) or gallium (Ga), combined with group VA nitrogen to form a compound semiconductor nitride such as BN, AlN, or GaN. For resonators, the dielectric is typically chosen based upon the piezoelectric constant of the material in order to generate the highest electromechanical coupling.
- **Monolithic topology** a description of an electrical circuit whereby all the elements of the circuit are fabricated at the same time using the same process flow.
- **Power Amplifier Duplexer (PAD)** an RF module containing a power amplifier and duplex filter components for the RF frontend of a smartphone.
- **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.
- **RF Spectrum** a defined range of frequencies.
- Surface acoustic wave (SAW) an acoustic sound wave traveling horizontally along the surface of a piezoelectric material.
- Wafer a thin slice of semiconductor material used in electronics for the fabrication of integrated circuits.

#### **Our Technology**

Current RF filters utilize a technology that is limited by the material properties of the base filter component. Existing bulk acoustic wave filters use an "acoustic wave ladder" that is based on a monolithic topology approach using lossy polycrystalline materials. By contrast, our BulkONE technology uses a single crystal material, which provides 30% higher piezoelectric properties, compared to conventional polycrystalline materials used in the industry today. We have fabricated R&D resonators that demonstrate the feasibility of our approach and believe our technology will yield a new generation of filter products.

BulkONE Technology consists of novel single-crystal piezoelectric materials, which are fabricated into bulk-mode, acoustic wave resonators and RF filters. Our patented piezoelectric materials contain high-purity Group III element nitride materials and possess a unique signature, which can be detected by conventional material metrology tools. We utilize analytical modeling techniques to aid in the design of our materials and our material specifications are typically outsourced to a third party for manufacturing. Once our materials are ready for processing, we supply our wafer manufacturing partner raw materials, a mask design file, and unique process sequence in order to fabricate our resonators and filters. Our wafer process flow is compatible with wafer level packaging (WLP) that allows for low profile, cost effective filters to be produced.

# Challenges Faced by the Mobile Device Industry

Rising consumer demand for always-on wireless broadband connectivity is creating an unprecedented need for high performance RF Front End for mobile devices. Mobile devices such as smartphones and tablets are quickly driving the IoT. The rapid growth in mobile data traffic is testing the limits of existing wireless bandwidth. Carriers and regulators have responded by opening new spectrums of RF frequencies, driving up the number of frequency bands in mobile devices. This substantial increase in frequency bands has created a demand for more filters, as well as a demand for filters with higher selectivity. The global transition to LTE and adoption of LTE-Advanced with more sophisticated carrier aggregation and multiple-input, multiple-output (MIMO) techniques will continue to push the requirements for increased supply of high performance filters. Furthermore, the new spectrum introduced by 4G/LTE is driving licensing at higher frequencies than previous 3G smartphone models. For example, new TDD LTE frequencies allocated for 4G wireless cover frequencies nearly twice as high as covered in previous generation phones. As a result, the demand for filters represents the single largest growth opportunity in the RFFE industry according to a Mobile Experts May 2016 report. For traditional "low band" frequencies, SAW filters have been the primary choice, while high band solutions have utilized BAW filters due to their performance and yield. While there are multiple sources of supply for SAW technology, the source of supply for BAW filters is more limited and essentially dominated by two manufacturers worldwide.

The first problem is that signal loss of current generation acoustic wave filters is excessively high, and up to half of the transmit power is wasted as heat, which ultimately constrains battery life. The second challenge is that the allocated spectrum for mobile communication bands requires high bandwidth RF Filters, which, in turn, requires wide bandwidth core resonator technology. In addition, filters with inferior selectivity either reduce the available operating bands the mobile device can support or increase the noise in the operating bands. Each of these problems negatively impacts the end-user's experience when using the mobile device.

## **Our Solutions**

Our immediate focus is on the commercialization of wide bandwidth RF filters operating in the high frequency portion of the RFFE (called high band). Using our BulkONE technology, we believe these filters enable new PAD module or RFFE competition for high band modules as well as performance-driven low band applications. Initially, we expect to target select strategic RFFE market leaders as well as Tier 2 mobile phone original equipment manufacturers ("OEMs") and/or RFFE module suppliers. Longer term, our focus will be to expand our market share by engaging with multiple mobile phone OEMs and RFFE module manufacturers. We are working with our foundry partner, Global Communications Semiconductor LLC ("GCS"), to commercialize our first filters using our BulkONE technology. This will be the first in a series of R&D activities that will set the foundation for filter products that we believe can disrupt the high band filter market. We will develop a series of filter designs used in the manufacturing of duplexers or more complex multiplexers targeting the 4G/LTE frequency bands. We believe our filter designs will create an alternative and replace filters currently manufactured using materials with fundamentally inferior performance.

# **Our Business Model**

We anticipate that our target customers will be mobile phone OEMs and/or those companies that make part of or the entire RFFE module. We expect sales to these companies of our filters, along with a recently released family of broadband amplifiers, to be the source of our revenue. We further expect to principally provide design and development resources and manage our outsourced partners to support our product realization process. There are two companies specializing in manufacturing of BAW filters that dominate this market. See "Competition" below. We believe our BulkONE technology provides a competitive filter alternative and that there will be factors creating significant barriers to entry for potential additional competitors, including:

- · Our growing portfolio of intellectual property (see "Intellectual Property" below);
- · Our highly experienced leadership and technical team; and
- Being first to market with a competitive high performance BAW filter alternative.

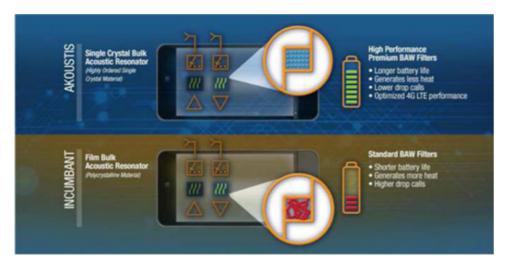
## The Mobile Internet

Rising consumer demand for always-on wireless broadband connectivity is creating an unprecedented need for high performance RFFE for mobile devices. Mobile devices such as smartphones and tablets are quickly becoming the primary means of accessing the Internet. The exponential growth in mobile data traffic is testing the limits of existing wireless back-up bandwidth. Carriers and regulators have responded by opening new RF spectrum, driving up the number of frequency bands in mobile devices. As a prime example, a Presidential directive was issued in 2010 to the FCC and other agencies to make available an additional 500 MHz of RF spectrum to meet the growing demand in the United States. Similar initiatives are occurring worldwide. Adding RF spectrum is not a complete solution. The added spectrum does not come in large contiguous blocks, but rather in small channels or bands of varying size and frequency. Thus, more data means more bands, and the result is a rapid and substantial increase in the number of filters in mobile devices.

# The Challenge

Moore's Law predicts that transistor density on integrated circuits will double approximately every two years, and the digital baseband of mobile devices has improved exponentially as predicted by Moore's Law. However, improvements to the analog RFFE have been limited by existing filter technology, with only incremental updates to existing technology. Consequently, the RFFE is taking up an ever-growing share of the total cost of mobile devices. Most mobile devices sold today operate on "fourth generation" wireless technology, or 4G. There are nearly fifty 4G bands recognized worldwide today, and the list is growing. The RFFE must meet these growing data demands while reducing cost and improving battery life. Our solution involves a new approach to RFFE component manufacturing, enabled by BulkONE technology. We expect our technology to produce filters that will reduce the overall system cost and improve performance of the RFFE.

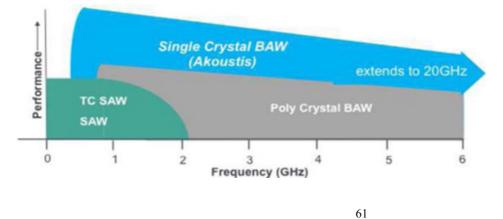
# Figure 1-Our Solution



# Single-Band Designs for Duplexers and Multiplexers

SAW filters have been preferred in modern RFFE because of their high performance, small size and low cost. However, traditional SAW ladder designs do not perform well in high frequency bands or bands with closely spaced receive and transmit channels, typical of many new bands. Therefore, BAW filters are needed for these bands. We have demonstrated in a development environment our ability to fabricate BAW resonators, the building block of BAW filters, that are more efficient than existing available BAW resonators, and we believe the improved efficiency will reduce the total cost of RFFE as well as reduce the battery demand for mobile devices. Additionally, we believe that our BulkONE filters will allow for a single manufacturing method that will support all of the BAW filter band range and a significant portion of the SAW band range. Figure 2 below illustrates what we believe will be the frequency range of our BulkONE technology.

# Figure 2- The potential range of our technology

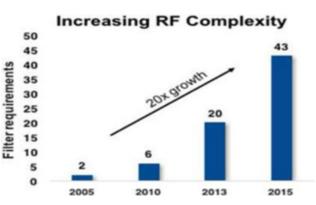


# Acoustic Wave RF Filter Technology

## **Pure-Play Filter Provider Enables New Module Competition**

Given the high sound velocity in our piezoelectric materials, our technology allows for a wide range of frequency coverage, and we plan to supply filters that will support 4G/LTE and beyond. We have successfully demonstrated resonators that will support the design and fabrication of 4G/LTE filters, and our current focus is on completing the development required to transition this single-crystal BAW technology to high volume manufacturing. We will be a pure-play filter supplier that will address the increasing RF complexity placed on RF front-end manufacturers supporting 4G/LTE and WIFI.

Figure 3- Increase in average number of RF filters per each mobile device from 2005 - 2015 (Source: Ericsson)



### Commercialization

Our immediate focus is to address problems in the RFFE with innovative single-band designs using our BulkONE technology. We are currently developing our first commercial single-band filter in collaboration with our foundry partner, GCS, under the terms of a signed development agreement. We are focused on developing fixed-band filters because we believe these designs present the greatest near-term potential for commercialization of our technology, and that once demonstrated, the foundry can be more efficiently readied for production compared to alternative technologies.

The development agreement with our foundry partner contains the following milestones:

- Milestone 1 (Manufacturing Partner Gap Analysis) Validate required materials, people, process and equipment are present for volume manufacturing.
- Milestone 2 (Process Transfer to Foundry Partner) Design of filters, technology transfer and fabrication on GCS's high-volume manufacturing equipment, fully tested wafers, and delivery of prototypes.
- Milestone 3 (Complete Filter Process Capability) Update design with process feedback, fabricate multiple wafers using the approved manufacturing process flow, fully tested wafers, calculated yield and delivery of initial product.
- Milestone 4 (Production-Ready Filter Design) Filter design complete and manufacturing process locked.

Milestone 5 (Product Packaging and Ramp) — Product fully packaged and ready for production, focus shift to revenue generation from filter sales.

Milestones 1 and 2 are complete. We continue to work on Milestone 3, with expected completion in the first half of 2017. We expect to generate revenue from the sale of our filters in the second half of 2017, after completion of Milestone 4 and Milestone 5.

Our Foundry Agreement was made effective as of February 27, 2015 and carries a term of five years. At the end of the original term, the Foundry Agreement will be extended automatically for one additional year unless within 180 days prior to the end of the initial term, either party gives written notice of its intention to terminate the agreement. The Foundry Agreement outlines proposed activities for development support that could be requested by us and provided by our foundry partner. The Foundry Agreement also covers the agreement to manufacture, test and deliver wafers manufactured using our resonator process flow pursuant to purchase orders issued by us.

The Joint Development Agreement we entered into with GCS in connection with the Foundry Agreement was made effective as of February 27, 2015 and carries a term of five years, at which time it terminates immediately without further notice or action when all Statements of Work governed by the agreement terminate or expire. During the term of the agreement, we will collaborate with each other to develop one or more products. Each of the parties will bear all direct and related costs associated with its development activities. The agreement calls for the designation of a project manager from each of the parties and the formation of an advisory committee made up of members from each party to manage escalation of issues unresolved by the project managers. The Joint Development Agreement indicates that we jointly own in equal, undivided shares title and interest in any joint development works and all Intellectual property rights embodied in either party's background technology. Background technology means all information that is owned, controlled, licensed, developed or acquired solely outside the performance of the Joint Development Agreement.

The Foundry Agreement and Joint Development Agreement are filed as exhibits to this Report. All references to the Foundry Agreement and Joint Development Agreement herein are qualified in their entirety by reference to the text thereof filed as an exhibit hereto, which is incorporated herein by reference.

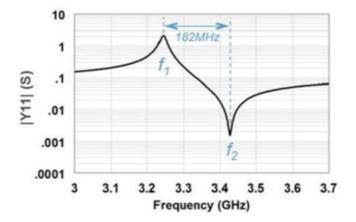
## **Research and Development**

Since inception, the Company's focus has been on developing an innovative mobile-wireless filter technology with a compelling value proposition to our potential customers and a significant and noticeable impact to the end user.

Whereas today's polycrystalline material (used to manufacture RF resonators and filters) is sputtered on a metal-coated carrier, our BulkONE technology employs high quality, single crystal resonator films, which are used as the enabler to create high performance BAW RF filters. This single crystal material is a key differentiator when compared to the incumbent amorphous thin-film technologies because it increases the acoustic velocity and the electromechanical coupling coefficient in the resonator, which results in higher filter efficiencies and lower power consumption, leading to simplified RFFEs, longer battery life and reduced tissue heating. Our spend for research and development totaled \$709,314 for the transition period ended June 30, 2016 and \$1,758,701 and \$470,987 for the year ended June 30, 2016 and 2015, respectively. Our spend for research and development totaled \$1,222,194 and \$244,635 for the year ended March 31, 2016 and the period May 12, 2014 (inception) through March 31, 2015, respectively. These R&D activities focused on single crystal material development and resonator demonstration. Current R&D investments include single crystal materials advancement, technology transfer to our manufacturing partner and resonator development and filter design.

As a result of our efforts, we developed and recently published an industry leading electromechanical coupling coefficient of 12.5% for our single crystal undoped AIN piezoelectric resonators as shown in Figure 4. The spacing between resonance and anti-resonance frequencies was 182MHz for our 3.4GHz resonator device. Our focus is now on improving the quality factor of our device through resonator design and process optimization experiments.

Figure 4- Akoustis' single crystal undoped AIN piezoelectric resonator device performance. The plot represents a de-embedded, two-port series-configured BAW resonator modeled near resonance frequency.



#### **Intellectual Property**

We rely on a combination of intellectual property rights, including patents and trade secrets, along with copyrights, trademarks and contractual obligations and restrictions to protect our core technology and business.

We currently have eleven pending patent applications in the United States and one issued patent that was published on June 7, 2016. In addition, outside the United States, we have four pending patent applications and three utility patents awarded. The three awarded applications entered the divisional process and are anticipated to result in up to three additional utility patents outside of the United States. The patents relate directly to our single-crystal bulk acoustic wave (BAW) technology, including materials and device designs, methods of manufacture, integrated circuit designs, wafer packaging, and point of use (to include mobile applications). The Company will continue to innovate and expand our patent portfolio, and when appropriate, we will look to purchase license(s) that grant access to additional intellectual property that enables, enhances or further expands our technical capabilities and/or product offerings.

We believe that it is likely that Akoustis will have competitive advantages from rights granted under our patent applications. Some applications, however, may not result in the issuance of any patents. In addition, any future patent may be opposed, contested, circumvented or designed around by a third party or found to be unenforceable or invalidated. Others may develop technologies that are similar or superior to our proprietary technologies, duplicate our proprietary technologies or design around patents owned or licensed by us.

We generally control access to, and use of, our confidential information through the use of internal and external controls, including contractual protections with employees, contractors and customers. We rely in part on the United States and international copyright laws to protect our intellectual property. All employees and consultants are required to execute confidentiality agreements in connection with their employment and consulting relationships with us. We also require them to agree to disclose and assign to us all inventions conceived or made in connection with the employment or consulting relationship.

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

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. Although we have not received any third party claims, we expect that in the future we may receive communications from various industry participants alleging our infringement of their patents or other intellectual property rights. Any lawsuits could subject us to significant liability for damages, invalidate our proprietary rights and harm our business and our ability to compete. Any litigation, regardless of success or merit, could cause us to incur substantial expenses, reduce our sales and divert the efforts of our technical and management personnel. In the event we receive an adverse result in any litigation, we could be required to pay substantial damages, seek licenses from third parties, which may not be available on reasonable terms or at all, cease the sale of products, expend significant resources to develop alternative technology or discontinue the use of processes requiring the relevant technology.

Akoustis and BulkONE are trademarks of Akoustis, Inc.

### Competition

The competitive landscape for the Company is small and is controlled by a handful of RF component suppliers. These companies include, among others, Broadcom (previously known as Avago Technologies Ltd.), Murata Manufacturing Co., Ltd., Qorvo, Inc., Skyworks Solutions Inc., Taiyo Yuden, and TDK Epcos. Two of these companies dominate the high band filter market, controlling a significant portion of the customer base and are increasing capacity to meet the growth demands of the 4G/LTE market.

Upon completion of our product development, we will compete directly with these companies to secure design slots inside RFFE modules - targeting companies that procure filters or internally source filters. While many of our competitors have more resources than we have, we believe that our filter designs will be superior in performance, and we will approach prospective customers as a pure-play filter supplier, offering advantages in performance over the full frequency range at competitive costs. Our challenge will be to convince the companies that we have a strong intellectual property position, which we will be able to increase in volume, that we will meet their price targets, and that we can satisfy reliability requirements.

# Employees

We place an emphasis on hiring the best talent at the right time to enable our core technology and business growth. This includes establishing a competitive compensation and benefits package, thereby enhancing our ability to recruit experienced personnel and key technologists. We currently have 15 full-time employees plus 12 independent contractors working with the Company, and we will continue to hire specific and targeted positions to further enable our technology and manufacturing capabilities.

#### **Government Regulations**

Our business and products in development are subject to regulation by various federal and state governmental agencies, including the radio frequency emission regulatory activities of the Federal Communications Commission ("FCC"), the consumer protection laws of the Federal Trade Commission, the import/export regulatory activities of the Department of Commerce, the product safety regulatory activities of the Consumer Products Safety Commission, and the environmental regulatory activities of the Environmental Protection Agency.

The rules and regulations of the FCC limit the RF used by, and level of power emitting from, electronic equipment. Our RF filters, as a key element enabling consumer electronic smartphone equipment, are required to comply with these FCC rules, and may require certification, verification or registration of our RF filters with the FCC. Certification and verification of new equipment requires testing to ensure the equipment's compliance with the FCC's rules. The equipment must be labeled according to the FCC's rules to show compliance with these rules. Testing, processing of the FCC's equipment certificate or FCC registration and labeling may increase development and production costs and could delay the implementation of our BulkONE acoustic wave resonator technology for our RF filters and the launch and commercial productions of our filters into the U.S. market. Electronic equipment permitted or authorized to be used by us through FCC certification or verification procedures must not cause harmful interference to licensed FCC users, and may be subject to RF interference from licensed FCC users. Selling, leasing or importing non-compliant equipment is considered a violation of FCC rules and federal law, and violators may be subject to an enforcement action by the FCC. Any failure to comply with the applicable rules and regulations of the FCC could have an adverse effect on our business, operating results and financial condition by increasing our compliance costs and/or limiting our sales in the United States.

The semiconductor and electronics industries also have been subject to increasing environmental regulations. A number of domestic and foreign jurisdictions seek to restrict the use of various substances, a number of which have been used in our products in development or processes. While we have implemented a compliance program to ensure our product offering meets these regulations, there may be instances where alternative substances will not be available or commercially feasible, or may only be available from a single source, or may be significantly more expensive than their restricted counterparts. Additionally, if we were found to be non-compliant with any such rule or regulation, we could be subject to fines, penalties and/or restrictions imposed by government agencies that could adversely affect our operating results. Our cost to maintain compliance with existing environmental regulations is expected to be nominal based on our structure in which we outsource a majority of our operations to suppliers that are responsible for meeting environmental regulations. We will continue to monitor our quality program and expand as required to maintain compliance and ability to audit our supply chain.

Noncompliance with applicable regulations or requirements could 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.

## **Organizational History**

We were incorporated as Danlax, Corp., in Nevada on April 10, 2013. Prior to the Merger and Split-Off (each as defined below), our business was the development and sales of mobile games.

On April 15, 2015, (i) we changed our name to Akoustis Technologies, Inc., and (ii) we increased our authorized capital stock from 75,000,000 shares of Common Stock, par value \$0.001 per share, to 300,000,000 shares of Common Stock, par value \$0.001 per share, and 10,000,000 shares of "blank check" preferred stock, par value \$0.001 per share.

On April 23, 2015, we completed a 1.094891-for-1 forward split of our Common Stock in the form of a dividend, with the result that the 11,740,000 shares of Common Stock outstanding immediately prior to the stock split became 12,854,020 shares of Common Stock outstanding immediately thereafter. All share and per share numbers in this prospectus relating to our Common Stock have been adjusted to give effect to this stock split, unless otherwise stated.

On May 22, 2015, our wholly owned subsidiary, Akoustis Acquisition Corp., a corporation formed in the State of Delaware on May 15, 2015 ("Acquisition Sub"), merged (the "Merger") with and into Akoustis, Inc., a corporation incorporated in the State of Delaware on May 12, 2014. Akoustis, Inc., was the surviving corporation in the Merger and became our wholly-owned subsidiary. All of the outstanding stock of Akoustis, Inc. was exchanged for shares of our Common Stock.

In connection with the Merger and pursuant to a Split-Off Agreement, we transferred our pre-Merger assets and liabilities to our pre-Merger majority stockholder, in exchange for the surrender by him and cancellation of 9,854,019 shares of our Common Stock (the "Split-Off").

As a result of the Merger and Split-Off, we discontinued our pre-Merger business and acquired the business of Akoustis, Inc., and we have continued the existing business operations of Akoustis, Inc., as a publicly-traded company under the name Akoustis Technologies, Inc.

In accordance with "reverse merger" accounting treatment, our historical financial statements as of period ends, and for periods ended, prior to the Merger have been replaced with the historical financial statements of Akoustis, Inc. in our SEC filings made subsequent to the Merger.

On May 22, 2015, we also changed our fiscal year from a fiscal year ending on July 31 of each year to one ending on March 31 of each year, and on August 11, 2016, we changed our fiscal year to one ending on June 30 of each year, effective immediately.

At a meeting of stockholders on December 15, 2016, our stockholders approved the reincorporation of the Company from the State of Nevada to the State of Delaware, pursuant to a plan of conversion. We filed Articles of Conversion with the Nevada Secretary of State and a Certificate of Conversion and a Certificate of Incorporation with the Delaware Secretary of State on December 15, 2016. As a result, we are now a Delaware corporation governed by Delaware law. In connection with the reincorporation, we reduced our authorized capital stock to 45,000,000 shares of Common Stock, par value \$0.001 per share, and 5,000,000 shares of "blank check" preferred stock, par value \$0.001 per share.

## Akoustis, Inc.

Akoustis, Inc. was founded in 2014 by experienced industry leaders and scientists from University of California at Santa Barbara (UCSB) and Cornell University. Our initial funding was through a \$0.5 million series seed funding in 2014, and we received \$655,000 in additional investments in convertible notes and stock by the founders and original angel investors in March 2015. We received a National Science Foundation ("NSF") Small Business Innovation Research ("SBIR") grant that started in January 2015 followed by a second grant award in April 2015. In addition, we received matching funds from North Carolina Science, Technology & Innovation Department of Commerce. More recently, we received a third NSF SBIR award in February 2016. The funds from these sources supported the operations of Akoustis, Inc. and the completion of multiple key Company milestones, including the application for more than ten patents, hiring of key personnel, the engagement with a foundry prototype facility, initiation of SBIR activities and the engagement of strategic partners who would consume our RF filters for wireless communications.

## The 2015 Offering

Concurrently with the closing of the Merger, we held a closing of a private placement offering (the "2015 Offering") in which we sold 3,531,104 shares of our Common Stock (including shares issued on conversion of convertible notes of Akoustis, Inc., as described below) to accredited investors, at a purchase price of \$1.50 per share (the "2015 Offering Price"). On June 10, 2015, we completed a second and final closing of the 2015 Offering in which we sold an additional 261,000 shares of Common Stock. In total, we sold an aggregate of 3,792,104 shares of Common Stock in the 2015 Offering for gross proceeds of \$5.7 million (before deducting expenses of the offering).

The closing of the 2015 Offering and the closing of the Merger were conditioned upon each other.

In connection with the 2015 Offering, we paid Northland Securities, Inc., and Katalyst Securities LLC, each a U.S. registered broker-dealer (the "Placement Agents"), a cash commission of 10% of the gross proceeds (or 2% in the case of certain existing Akoustis, Inc., investors) raised from investors in the 2015 Offering. In addition, the Placement Agents received warrants to purchase a number of shares of Common Stock equal to 10% (or 2% in the case of certain existing Akoustis, Inc., investors) of the number of shares of Common Stock sold in the 2015 Offering, with a term of five (5) years and an exercise price of \$1.50 per share (the "2015 Placement Agent Warrants"). Any sub-agent of the Placement Agents that introduced investors to the 2015 Offering was entitled to share in the cash fees and warrants attributable to those investors as described above.

As a result of the foregoing, the Placement Agents and their sub-agents were paid aggregate commissions of \$486,976 and were issued 2015 Placement Agent Warrants to purchase an aggregate of 324,650 shares of our Common Stock. We were also required to reimburse the Placement Agents approximately \$77,150 of legal expenses incurred in connection with the 2015 Offering.

A form of the 2015 Placement Agent Warrant issued to the Placement Agents and their sub-agents is filed as an exhibit to this Report. All descriptions of the 2015 Placement Agent Warrants herein are qualified in their entirety by reference to the text of such warrant filed as an exhibit hereto and incorporated herein by reference.

# The First 2016 Offering

On March 10, 2016, we held a closing of a private placement offering (the "March 2016 Offering") in which we sold 494,125 shares of our Common Stock to accredited investors at a fixed purchase price of \$1.60 per share (the "First 2016 Offering Price"), for aggregate gross proceeds of \$790,600 (before deducting expenses of the March 2016 Offering).

On April 14, 2016, we held a closing of a private placement offering (the "April 2016 Offering," and together with the March 2016 Offering, the "First 2016 Offering") in which we sold 1,741,185 shares of our Common Stock at a fixed purchase price of \$1.60 per share (the "First 2016 Offering Price"), for aggregate gross proceeds of \$2.8 million (before deducting expenses of the April 2016 Offering).



In connection with the First 2016 Offering, we agreed to pay the Placement Agents a cash commission of 8% of the gross proceeds raised from investors first contacted by the Placement Agents in the First 2016 Offering. In addition, the Placement Agents received warrants to purchase a number of shares of Common Stock equal to 10% of the number of shares of Common Stock sold in the First 2016 Offering, with a term of five (5) years and an exercise price of \$1.60 per share (the "2016 Placement Agent Warrants"). Any sub-agent of the Placement Agents that introduced investors to the First 2016 Offering was entitled to share in the cash fees and warrants attributable to those investors as described above.

As a result of the foregoing, the Placement Agents and their sub-agents were paid an aggregate commission of \$196,752 and were issued 2016 Placement Agent Warrants to purchase an aggregate of 153,713 shares of Common Stock. We were also required to reimburse the Placement Agents approximately \$17,500 of legal expenses incurred in connection with the First 2016 Offering, of which \$7,500 was paid by the issuance of 4,690 shares of Common Stock (valued at the First 2016 Offering Price).

A form of the 2016 Placement Agent Warrant issued to the Placement Agents and their sub-agents is filed as an exhibit to this Report. All descriptions of the 2016 Placement Agent Warrants herein are qualified in their entirety by reference to the text of such warrant filed as an exhibit hereto and incorporated herein by reference.

## The Second 2016 Offering

On November 25, 2016 we held a closing of a private placement offering (the "Second 2016 Offering") in which we sold 322,000 shares of our Common Stock at a fixed purchase price of \$5.00 per share (the "Second 2016 Offering Price"), for aggregate gross proceeds of \$1,610,000 (before deducting expenses of the Second 2016 Offering). We did not engage or pay any placement agents or brokers in connection with the Second 2016 Offering.

Investors in the Second 2016 Offering were given anti-dilution protection with respect to the shares of Common Stock purchased in the Second 2016 Offering for the period from November 25, 2016 until 90 days after the date on which the registration statement that we are required to file under a Registration Rights Agreement with the investors is declared effective by the SEC (see "Description of Securities — Registration Rights" below). We have not yet filed such registration statement with the SEC. Pursuant to the anti-dilution rights, if we issue additional shares of Common Stock or Common Stock equivalents (subject to customary exceptions, including but not limited to issuances of awards under the Company's 2016 Stock Incentive Plan and certain issuances of securities in connection with credit arrangements, equipment financings, lease arrangements or similar transactions) for a consideration per share less than the Second 2016 Offering Price (as adjusted for any subsequent stock dividend, stock split, distribution, recapitalization, reclassification, reorganization or similar event) (the "Lower Price"), each such investor will be entitled to receive from the Company additional shares of Common Stock in an amount such that, when added to the number of shares of Common Stock initially purchased by such investor, will equal the number of shares of Common Stock that such investor's offering subscription amount would have purchased at the Lower Price.

# Properties

Our headquarters in Huntersville, NC, is a 4,800 square foot facility that we lease for base rent of \$3,800 per month, with a term expiring in April 2018. Although our facilities are sufficient to meet our current needs, we plan to expand as and when needed.

#### LEGAL PROCEEDINGS

From time to time, we may become involved in various lawsuits and legal proceedings that arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in any such matters may arise from time to time that may have an adverse effect on our business, financial condition, results of operations and prospects.

We are currently not aware of any material pending legal proceedings to which we are a party or of which any of our property is the subject, nor are we aware of any such proceedings that are contemplated by any governmental authority.

# DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

#### **Directors and Executive Officers**

Below are the names of, and certain information about, our current executive officers and directors.

Name	Age	Position	Date Named to Board of Directors/as Executive Officer
Arthur E. Geiss	63	Co-Chairman of the Board	May 22, 2015
Jerry D. Neal	72	Co-Chairman of the Board	May 22, 2015
Jeffrey B. Shealy	47	Chief Executive Officer; Director	May 22, 2015
David M. Aichele	50	Vice President of Business Development	May 22, 2015
Mark Boomgarden	49	Vice President of Operations	May 22, 2015
Cindy C. Payne	56	Chief Financial Officer	May 22, 2015
Steven P. DenBaars	54	Director	May 22, 2015
Jeffrey K. McMahon	45	Director	May 22, 2015

Directors are elected to serve until their successors are elected and qualified. Directors are elected by a plurality of the votes cast at the meeting of stockholders at which they are elected and hold office until the expiration of the term for which he or she was elected or until a successor has been elected and qualified.

A majority of the authorized number of directors constitutes a quorum of the Board of Directors for the transaction of business. The directors must be present at the meeting to constitute a quorum. However, any action required or permitted to be taken by the Board of Directors may be taken without a meeting if all members of the Board of Directors individually or collectively consent in writing to the action.

Executive officers are appointed by the Board of Directors and serve at its pleasure.

The principal occupation and business experience during the past five years for our executive officers and directors is as follows:

Arthur E. Geiss, Co-Chairman of the Board, founded AEG Consulting, LLC in 2003 and currently serves as Owner and CEO. AEG Consulting offers guidance concerning manufacturing, operations, and process development to technology companies. Prior to establishing AEG Consulting, Mr. Geiss served as VP Wafer Fab Operations at RFMD (now Qorvo, Inc.). He was responsible for the start-up and operations of Gallium Arsenide epitaxial-growth and wafer-fabrication. Previous to RFMD, Mr. Geiss held management positions with Alpha Industries, Inc. (purchased by Skyworks Solutions, Inc.) and before that at ITT Gallium Arsenide Technology Center (purchased by Cobham plc). At both companies, he was responsible for process and device development and wafer fabrication operations. Prior to these, Mr. Geiss held a research position at the Xerox Palo Alto Research Center (now PARC, Inc.). At PARC he investigated the structure of vitreous materials and amorphous thin-films using Raman spectroscopy. Mr. Geiss has served as a Member of the Executive Committee of the IEEE GaAs IC Symposium (now CSICS) and as a Member of the Executive Committee of the GaAs Manufacturing. Mr. Geiss earned a B.S. degree at Lafayette College and M.S. and Ph.D. degrees at Brown University, all in physics. We believe that Mr. Geiss adds value to our Board of Directors based on his extensive experience with technology companies, his executive leadership and management experience and his research background.



Jerry D. Neal, Co-Chairman of the Board, founded RF Micro Devices Inc. (now, Qorvo, Inc.) in 1991 and served as its Executive Vice President of Marketing and Strategic Development from January 2002 to May 31, 2012. Dr. Neal served as a Vice President of Marketing of RF Micro Devices Inc., from May 1991 to January 2000 and its Executive Vice President of Sales, Marketing and Strategic Development from January 2000 to January 2002. Prior to joining RF Micro Devices Inc., he was employed for 10 years with Analog Devices, Inc., including as Marketing Engineer, Marketing Manager and Business Development Manager. Dr. Neal also founded Moisture Control Systems for the production of his patented electronic sensor for measurement of soil moisture for research, which was later sold to Hancor, Inc. He has been a Director of Jazz Semiconductor, Inc. since November 2002. Dr. Neal served as a Director of RF Micro Devices Inc., from February 1992 to July 1993. He also held various positions in Hewlett-Packard. Dr. Neal received his Associate's Degree in Electrical Engineering from Gaston Technical Institute and North Carolina State University and his doctor of business management degree from Southern Wesleyan University. We believe that Mr. Neal adds value to our Board of Directors based on his extensive executive leadership and management experience and his sales, marketing and product development background.

Jeffrey B. Shealy is our CEO and a Director. He has over 20 years' experience in RF/Wireless focused on building businesses around solid-state materials and electron device innovation. He held the position of Vice President and General Manager at RF Micro Devices, Inc. (now Qorvo) from 2001 until 2014. Mr. Shealy is a Howard Hughes Doctoral Fellow and spent 7 years with Hughes Electronics at Hughes Research Labs (now HRL Labs) and Hughes Network Systems (now Hughes). He previously founded RF Nitro, a RF Power Amplifier high-tech venture, which was acquired by RFMD in 2001. Mr. Shealy holds an MBA degree from Wake Forest University, Master of Science and Doctorate degrees in Electrical and Computer Engineering from University of California at Santa Barbara (UCSB), and a Bachelor's of Science degree in Electrical and Computer Engineering from NC State University. We believe that Mr. Shealy adds value to our Board of Directors based on his intimate knowledge of our business plans and strategies, his experience with high tech startup ventures and his years of experience in the RF/Wireless industry.

**David M. Aichele** is Vice President of Business Development responsible for leading the sales and marketing efforts of the company. Mr. Aichele joined the company in May 2015, bringing over 20 years of international sales, business development, and marketing experience with him. Prior to Akoustis, Mr. Aichele was EVP Sales & Marketing for T1Visions, a high tech software startup company ranking among the 2014 INC 500 fasting growing private companies in the U.S from 2013 to May 2015. Mr. Aichele held Director positions at RFMD (previously Qorvo) from 2014 to 2013, where he was responsible for the business development and launch of new RF semiconductor products targeting the cellular market, and senior management positions at Tessera and TE Connectivity, where he led business development and sales teams. Mr. Aichele holds a BSEE from Ohio University and an MBA from the Leeds School of Business at the University of Colorado.

**Mark D. Boomgarden** is Vice President of Operations and has over 20 years of experience in high-technology companies, including highvolume manufacturing of wafer-based products, licensing and technology transfer, research and development, mergers and acquisitions, and new-company formation. He has held key leadership roles in operations, engineering and business development, including both domestic and international companies. Prior to Akoustis, Mark served as Vice President and General Manager at DigitalOptics Corporation, a wholly owned subsidiary of Tessera Technologies, Inc. (Nasdaq: TSRA) from 2009-2013. He joined DigitalOptics from Tessera North America, where he served as General Manager of their wafer-level optics division and as Vice President of their wafer-based camera business for mobile phones from 2006-2009. Prior to Tessera, Mark worked in various operations and engineering leadership positions with Digital Optics (a private company) and Alcatel. Mark holds a BSEE from the University of North Carolina at Charlotte (UNCC). He is a past Chairman of the Electrical and Computer Engineering (ECE) Advisory Board at UNCC, a founding Board Member of the Energy Production and Infrastructure Center (EPIC), and a current board member of Koyr and CLT Joules. Mark is a veteran of the United States Navy Submarine Force, U.S. Atlantic Fleet.

**Steven P. DenBaars** is a Professor of Materials and Co-Director of the Solid-State Lighting Center at UC Santa Barbara. Professor DenBaars joined UCSB in 1991 and currently holds the Mitsubishi Chemical Chair in Solid State Lighting and Displays. He is also a co-founder and current Board member of two GaN startup companies, Soraa Inc. and Soraa Laser Inc. Dr. DenBaars has been in the LED business for over 25 years starting with his prior work at Hewlett-Packard Optoelectronics division in 1988 and involvement in more than two LED companies and one laser diode company. Specific research interests include growth of wide-band gap semiconductors (GaN based), and their application to Blue LEDs and lasers and energy efficient solid state lighting. This research has led to over 750 scientific publications and over 160 U.S. patents on electronic materials and devices. He has been awarded a NSF Young Investigator award, Young Scientist Award of the ISCS, is an IEEE Fellow, IEEE Aron Kressel Award, Visiting Professor at Nanyang Technological University (NTU), Singapore, and the Institute for Advanced Studies (IAS) HKUST. He was recently elected to the National Academy of Engineering (2012), and elected Fellow of the National Academy of Inventors (2014). We believe that Professor DenBaars adds value to our Board of Directors based on his years of experience in the LED industry and his extensive research involving wide-based gap semiconductors and their application to high power electronic devices.

Jeffrey K. McMahon has been employed by North Highland, a global management consulting firm, since 2003. He has held the position of Managing Director since 2014 and is the current Market Lead for North Highland's largest market. He has an extensive background in business and information technology consulting in the financial services, energy, and telecommunications industries. He has 20 years of experience helping Fortune 100 companies drive revenue, optimize processes, improve customer experience and manage risk. His areas of expertise include marketing, strategy articulation and realization, strategic execution, business process management and merger integration. Prior to joining North Highland, Mr. McMahon was a Manager in Accenture's process practice area. Mr. McMahon received a Bachelor of Science degree in Civil Engineering from North Carolina State University. We believe that Mr. McMahon adds value to our Board of Directors based on his extensive experience in business and technology consulting and his marketing and strategization expertise.

**Cindy C. Payne** joined us in 2015 as CFO and Treasurer, bringing over 20 years of experience in financial management. Ms. Payne most recently served as the CFO for Amerock LLC from 2014-2015, a private equity owned hardware distributor in Mooresville, NC. Prior to joining Amerock, Ms. Payne held the position of CFO for Tolt Service Group, a private equity owned technology services provider, from 2010 until the company's sale in 2014. Her experience prior to Tolt included the role of Director of Financial Planning and Analysis in the Soft Trim Division of International Automotive Components, a Tier I supplier to the automotive industry and the role of Controller of NewBold Corporation. NewBold Corporation, located in the Roanoke, Virginia area, offers both manufactured products and technology services to retail and healthcare markets. Ms. Payne graduated Magna Cum Laude from Western Carolina University with a Bachelor of Science in Business Administration and is a Certified Public Accountant, licensed in the state of Virginia.

#### **Director Independence**

Our Common Stock is not listed on, and we are not currently subject to listing requirements of, any national securities exchange or interdealer quotation system which has requirements that a majority of the board of directors be "independent," and as a result, we are not at this time required to have our Board of Directors be comprised of a majority of "independent directors." Nevertheless, our Board has determined that Messrs. Geiss, DenBaars, McMahon and Neal are independent directors under the applicable standards of The Nasdaq Stock Market. In reaching this determination, the Board considered Mr. Geiss' relationship with AEG Consulting, a firm owned and operated by Mr. Geiss, which provides consulting services to the Company, as discussed below under "Certain Relationships and Related Person Transactions." After consideration, the Board determined that this relationship did not impact Mr. Geiss' ability to serve as an independent director.

#### **Family Relationships**

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

# **Involvement in Certain Legal Proceedings**

None of our directors or executive officers has been involved in any of the following events during the past ten years:



- any bankruptcy petition filed by or against any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time;
- any conviction in a criminal proceeding or being subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- being subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his or her involvement in any type of business, securities or banking activities; or
- being found by a court of competent jurisdiction (in a civil action), the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated.

## **Board Committees**

Our Board has established a Compensation Committee consisting of Messrs. Geiss, McMahon, and Neal to assist the Board in overseeing and reviewing information from management regarding compensation and human capital issues within the Company. The Compensation Committee operates under a written charter, available on our website at www.akoustis.com, and is responsible for approving the individual elements of total compensation for our Chief Executive Officer and other executive officers. The Board currently has not established any other committees. Our Board of Directors may designate from among its members an executive committee and one or more other committees in the future.

We do not have an audit committee or audit committee charter. The entire Board of Directors oversees our audits and auditing procedures. The Board of Directors has determined that none of our directors meets the definition of "audit committee financial expert" within the meaning of Item 407(d)(5) of Regulation S-K. Given the Company's size and early stage of operations, the Board of Directors has not yet recruited an audit committee financial expert to join the Board.

We do not have a nominating committee or a nominating committee charter. Further, we have not adopted a policy with regard to the consideration of any director candidates recommended by security holders. To date, no security holders have made any such recommendations.

The entire Board of Directors performs all functions that would otherwise be performed by other committees. Given the present size of our board and the scope of our operations, we believe it is not practical for our Board to have additional committees. If we are able to grow our business and increase our operations, we intend to expand the size of our board and allocate responsibilities accordingly.

# **Compensation Committee Interlocks and Insider Participation**

No executive officer of the Company has served as a director or member of the Compensation Committee (or other committee serving an equivalent function) of any other entity, one of whose executive officers served as director of the Company during the year ended June 30, 2016.

# **EXECUTIVE COMPENSATION**

#### **Summary Compensation Table**

In connection with the Merger, on May 22, 2015, we changed our fiscal year from a fiscal year ending on July 31 to a fiscal year ending on March 31. On August 11, 2016, we changed our fiscal year from a fiscal year ending on March 31 to a fiscal year ending on June 30, effective immediately. Accordingly, the following table sets forth information concerning the total compensation awarded to, earned by or paid to our named executive officers during the three-month transition period ("TP") ended June 30, 2016 and the years ended March 31, 2016 and 2015 (our prior fiscal years). Ivan Krikun, our former Chief Executive Officer prior to the Merger, did not receive any compensation from the Company in either of the last two completed fiscal years.

Fiscal Year		Salary (\$)	Bonus (\$)	Stock Awards (\$)(2)	All Other Compensation(\$)(3)	Total (\$)
Jeffrey Shealy, CEO (1)	TP 2016 2016 2015	42,484 150,000 130,602	30,000	- -	9,568 27,309 12,434	52,052 207,309 143,036
Mark Boomgarden, VP of Operations (1)	TP 2016 2016 2015	36,615 117,692	13,600	- 67,450 -	8,762 36,334 14,384	45,377 235,076 14,384
Cindy Payne, Chief Financial Officer (1)	TP 2016 2016 2015	39,038 114,327 -	13,775	217,500	5,564 12,052 -	44,602 357,654
Dave Aichele, VP of Business Development (1)	TP 2016 2016 2015	37,143 121,876	- 13,600 -	- 165,000 -	8,149 23,187	45,292 323,663

(1) Includes bonus amount earned during the fiscal year ended March 31, 2016. The amounts were paid in May 2016.

(2) See Note 10 to the audited financial statements included in this prospectus for a discussion of the assumptions made in the valuation of stock awards and option awards.

(3) Other compensation is broken down by each executive below:

	Fiscal Year	Healthcare, & Life Insurance (\$) (a)	401K Contribution (\$) (b)	Contractor Compensation (\$)	Total (\$)
Jeffrey Shealy, CEO	TP 2016 2016 2015	6,753 22,232 12,434	2,815 5,077	- - -	9,568 27,309 12,434
Mark Boomgarden, VP of Operations (c)	TP 2016 2016 2015	6,753 18,681	2,009 4,603	13,050 14,384	8,762 36,334 14,384
Cindy Payne, CFO	TP 2016 2016 2015	3,451 7,590	2,113 4,462	-	5,564 12,052
David Aichele, VP of Business Development	TP 2016 2016 2015	6,140 18,584	2,009 4,603	1	8,149 23,187

(a) Healthcare costs include employer-paid medical, dental, and vision benefits generally available to all employees. Employer-paid life insurance is included and was less than \$100.00 annually per executive for the transition period ended June 30, 2016 and our prior fiscal years ended March 31, 2016 and 2015.

- (b) Effective June 1, 2015, we established a 401(k) retirement savings plan, with an employer matching contribution, for all employees. We have no other plans in place and have never maintained any other plans that provide for the payment of retirement benefits or benefits that will be paid primarily following retirement including, but not limited to, tax qualified deferred benefit plans, supplemental executive retirement plans, tax-qualified deferred contribution plans and nonqualified deferred contribution plans.
- (c) Mr. Boomgarden performed services for Akoustis, Inc., under an independent contractor agreement prior to his employment with the Company.

Except as indicated below, we have no contracts, agreements, plans or arrangements, whether written or unwritten, that provide for payments to the named executive officers listed above.

## **Outstanding Equity Awards at Fiscal Year-End**

At June 30, 2016, we had two compensation plans approved by our stockholders: the 2014 Stock Plan and the 2015 Equity Incentive Plan (the "2015 Plan"). The following table provides information about equity awards granted to our Named Executive Officers that were outstanding as of the end of Akoustis, Inc.'s last fiscal year ended June 30, 2016.

	Stock	Awards
		Market value of shares or units of stock that have not vested (\$)
Jeffrey Shealy, CEO (1)		-
Mark Boomgarden, VP of Operations (2)	155,682	652,308
Cindy Payne, CFO (2)	145,000	607,550
David Aichele, VP of Business Development (2)	110,000	460,900

(1) Mr. Shealy had no outstanding option or stock awards as of June 30, 2016.

(2) Reflects stock options and stock awards valued at the closing ask value of \$4.19 as of June 30, 2016.

#### **Employment Agreements**

On June 15, 2015, we entered into a three-year employment agreement with our Chief Executive Officer, Jeffrey B. Shealy. After the initial three-year term, the agreement will be automatically renewed for successive one-year periods unless terminated by either party on at least 30 days' written notice prior to the end of the then-current term. Mr. Shealy's annual base salary was \$150,000, subject to increase or decrease annually as determined by our Board of Directors. Effective July 4, the Board increased Mr. Shealy's salary to \$154,500. Mr. Shealy is eligible, at the discretion of our Board of Directors, to receive an annual cash bonus of up to 100% of his annual base salary, which may be based on us achieving certain operational, financial or other milestones (the "Milestones") that may be established by our Board of Directors. Mr. Shealy is entitled to receive stock options or other equity incentive awards under the 2015 Plan as and when determined by the Board, and is entitled to receive perquisites and other fringe benefits that may be provided to, and is eligible to participate in any other bonus or incentive program established by us for, our executives. Mr. Shealy and his dependents are also entitled to participate in any of our employee benefit plans subject to the same terms and conditions applicable to other employees. Mr. Shealy will be entitled to be reimbursed for all reasonable travel, entertainment and other expenses incurred or paid by him in connection with, or related to, the performance of his duties, responsibilities or services under his employment agreement, in accordance with policies and procedures, and subject to limitations, adopted by us from time to time.

In the event that Mr. Shealy is terminated by us without Cause (as defined in his employment agreement) or he resigns for Good Reason (as defined in his employment agreement) during the term of his employment, Mr. Shealy would be entitled to (x) an amount equal to his annual base salary then in effect (payable in accordance with the Company's normal payroll practices) for a period of 24 months commencing on the effective date of his termination (the "Severance Period") (in the case of termination by the executive for Good Reason, reduced by any cash remuneration paid to him because of any other employment or self-employment during the Severance Period), and (y) if and to the extent the Milestones are achieved for the annual bonus for the year in which the Severance Period commences (or, in the absence of Milestones, our Board of Directors has, in its sole discretion, otherwise determined an amount of Mr. Shealy's annual bonus for such year), an amount equal to such annual bonus pro-rated for the portion of the performance year completed before Mr. Shealy's employment terminated, (z) any unvested stock options, restricted stock or similar incentive equity instruments will vest immediately. For the duration of the Severance Period, Mr. Shealy will also be eligible to participate in our benefit plans or programs, provided Mr. Shealy was participating in such plan or program immediately prior to the date of employment termination, to the extent permitted under the terms of such plan or program (collectively, the "Termination Benefits"). If Mr. Shealy's employment is terminated during the term by us for Cause, by Mr. Shealy for any reason other than Good Reason or due to his death, then he will not be entitled to receive the Termination Benefits, and shall only be entitled to the compensation and benefits that shall have accrued as of the date of such termination (other than with respect to certain benefits that may be available to Mr. Shealy as a result of a Permanent Disability (as defined in his employment agreement).

On June 15, 2015, we also entered into an employment agreement with each of David M. Aichele, our Vice President of Business Development, Mark Boomgarden, our Vice President of Operations, and Cindy C. Payne, our Chief Financial Officer. Each of these employment agreements has substantially the same terms as that of Mr. Shealy described above, except as follows:

-	Term	S	Base alary (1)	Eligible Bonus % of Base Salary	Severance Period
David M. Aichele	2 years	\$	136,000	50%	6 months
Mark Boomgarden	2 years	\$	136,000	50%	6 months
Cindy C. Payne	2 years	\$	145,000	50%	6 months

Each named executive's salary is subject to increase or decrease annually as determined by our Board of Directors. Effective July 4, 2016, the Board increased the salaries of Mr. Aichele, Mr. Boomgarden and Ms. Payne to \$140,080, \$140,080 and \$149,350, respectively.

In addition, in accordance with each such employment agreement, each of these executives received a restricted stock award under our 2015 Plan for the number of shares of the Company's Common Stock shown below. These restricted stock awards are subject to a repurchase option in favor of the Company that lapses over a four-year period, as follows: the repurchase option on 50% of the shares will lapse at the end of two years from the date of issuance, and the repurchase option on 25% of the shares will lapse at the end of each of the third and fourth years from the date of issuance.

	Number of Shares of Restricted Stock
David M. Aichele	110,000
Mark Boomgarden	38,000
Cindy C. Payne	145,000

Under the terms of the 2015 Plan, in the event of a merger or Change in Control (as defined in the 2015 Plan) of the Company, the treatment of each outstanding restricted stock award will be determined by the Administrator (as defined in the 2015 Plan), including whether each such award will be assumed or an equivalent option or right substituted by the successor corporation. The Administrator will not be required to treat all awards similarly in the transaction. In the event that the successor corporation does not assume or substitute for the award, all restrictions on the restricted stock will lapse.

#### **Restricted Stock Agreements**

Akoustis, Inc., entered into, and upon the Merger the Company assumed, restricted stock purchase agreements with each of Steve DenBaars, Mark Boomgarden and Arthur Geiss pursuant to which Akoustis, Inc. issued to each of those individuals a number of shares of Akoustis, Inc. Common Stock, which in the Merger were exchanged for shares of our Common Stock as shown below. The Company has the right to repurchase some or all of such shares upon termination of the individual's service with the Company, whether voluntary or involuntary, for 60 months from the date of termination. 25% of Mr. Geiss' shares were released from the repurchase option on June 16, 2015, and an additional 1/48th of the shares shall be released from the repurchase option will immediately cease as of the termination of service. During the year ended June 30, 2016, the Company amended the original restricted stock agreements for certain award recipients including Messrs. DenBaars and Boomgarden. According to the amendment, 75% of the shares as to which the repurchase option had not lapsed as of September 30, 2015, shall be released from the repurchase option on the third anniversary of the original effective date of the agreement. The remaining 25% of the shares shall be released from the repurchase option on the fourth anniversary of the original effective date, provided that such scheduled releases from the repurchase option on the fourth anniversary of the original effective date, provided that such scheduled releases from the repurchase option on the fourth anniversary of the original effective date, provided that such scheduled releases from the repurchase option on the fourth anniversary of the original effective date, provided that such scheduled releases from the repurchase option will immediately cease as of the termination of service.

The number of shares subject to these repurchase agreements as of June 30, 2016 are:

Steve DenBaars	44,562
Mark Boomgarden	115,454
Arthur Geiss	11,647

# **Director Compensation**

We believe that our director compensation policy aligns the interest of our non-employee directors with that of our stockholders by compensating each such director with stock option grants. Each director upon commencement of his or her service receives an option to purchase 40,000 shares of Common Stock, which vests over four years in equal annual installments, subject to continuation of service as a director. Our policy also is to reimburse these directors for reasonable out-of-pocket expenses related to their role on our board.

The table below summarizes all compensation received by each of the Company's non-employee directors for services as a director performed during the three-month transition period ended June 30, 2016 and our prior fiscal year ended March 31, 2016.

Name	Fiscal Year	Option awards (\$)(1)	All other compensation (\$)	Total (\$)
		(+)(-)	•• (*)	(+)
Arthur E. Geiss (2)	TP 2016	-	4,012	4,012
	2016	27,931	9,462	37,393
Jerry D. Neal	TP 2016	-	-	-
	2016	27,931	-	27,931
Steven P. DenBaars	TP 2016	-	-	-
	2016	27,931	-	27,931
Jeffrey K. McMahon	TP 2016	-	-	-
	2016	27,931	-	27,931

(1) Options were granted under our 2015 Plan following the Merger to each of our four non-employee directors to purchase 40,000 shares of our Common Stock, with an exercise price of \$1.50 per share, vesting in equal annual installments over four years and exercisable until May 22, 2025.

(2) Mr. Geiss received \$4,012 and \$9,462 in compensation for consulting services provided by his consulting firm, AEG Consulting, for the three-month transition period ended June 30, 2016 and the twelve months ended March 31, 2016, respectively.

# SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. In accordance with SEC rules, shares of our Common Stock that may be acquired upon exercise of stock options or warrants that are currently exercisable or that become exercisable within 60 days after December 12, 2016 (the "Determination Date") are deemed beneficially owned by the holders of such options and warrants and are deemed outstanding for the purpose of computing the percentage of ownership of such person, but are not treated as outstanding for the purpose of computing the percentage of ownership of any other person. Subject to community property laws, where applicable, the persons or entities named in the tables below have sole voting and investment power with respect to all shares of our Common Stock indicated as beneficially owned by them.

The following table sets forth information with respect to the beneficial ownership of our Common Stock as of the Determination Date by (i) each stockholder known by us to be the beneficial owner of more than 5% of our Common Stock (our only class of voting securities), (ii) each of our directors and executive officers, and (iii) all of our directors and executive officers as a group. To the best of our knowledge, except as otherwise indicated, each of the persons named in the table has sole voting and investment power with respect to the shares of our Common Stock beneficially owned by such person, except to the extent such power may be shared with a spouse. For shares subject to repurchase options, as indicated in the notes to the table below, see "Executive Compensation — Employment Agreements" and "— Restricted Stock Agreements" below for a description of the repurchase option. To our knowledge, none of the shares listed below are held under a voting trust or similar agreement, except as noted. To our knowledge, there is no arrangement, including any pledge by any person of securities of the Company or any of its parents, the operation of which may at a subsequent date result in a change in control of the Company.

	Amount and nature of beneficial <u>ownership<sup>(1)(2)</sup></u>	Percent of Class
Jeffrey B. Shealy, Chief Executive Officer, Director <sup>(4)</sup>	3,486,586	21.6%
David M. Aichele, Vice President of Business Development <sup>(5)</sup>	136,250	*
Mark Boomgarden, Vice President of Operations <sup>(6)</sup>	245,441	1.5%
Cindy C. Payne, Chief Financial Officer <sup>(7)</sup>	184,375	1.1%
Steven P. DenBaars, Director <sup>(8)(9)</sup>	275,858	1.7%
Arthur E. Geiss, Director, Co-Chairman of the Board <sup><math>(8)(10)</math></sup>	66,306	*
Jeffrey K. McMahon, Director <sup>(8) (11)</sup>	541,888	3.4%
Jerry D. Neal, Director, Co-Chairman of the Board <sup>(8) (11)</sup>	357,000	2.2%
All directors and executive officers as a group (8 persons) <sup>(12)</sup>	5,293,704	32.7%
Mark Tompkins		
App 1, Via Guidino 23		
Lugano 6900, Switzerland	2,385,706	14.8%

\*Less than 1%

- (1) Unless otherwise indicated in the table, the address for each person named in the table is c/o Akoustis Technologies, Inc., 9805 Northcross Center Court, Suite H, Huntersville, NC 28078.
- (2) Unless otherwise indicated in the table, the shares are held directly by the beneficial owner.
- (3) Applicable percentage ownership is based on 16,158,981 shares of Common Stock outstanding as of the Determination Date, together with securities exercisable for or convertible into shares of Common Stock within 60 days after the Determination Date, for each shareholder. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.
- (4) Includes 36,000 restricted shares that are subject to a repurchase option.
- (5) Includes 130,000 restricted shares that are subject to a repurchase option.
- (6) Includes 175,682 restricted shares that are subject to a repurchase option.
- (7) Includes 175,000 restricted shares that are subject to a repurchase option.
- (8) Includes 10,000 shares of Common Stock issuable upon exercise of an option that vested in May 2016 and is exercisable until May 22, 2025.
- (9) Includes 66,562 restricted shares that are subject to a repurchase option.
- (10) Includes 33,647 restricted shares that are subject to a repurchase option.
- (11) Includes 22,000 restricted shares that are subject to a repurchase option.
- (12) Includes 704,891 restricted shares that are subject to a repurchase option.

# CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

SEC rules require us to disclose any transaction or currently proposed transaction in which the Company is a participant and in which any related person has or will have a direct or indirect material interest involving the lesser of \$120,000.00 or one percent (1%) of the average of the Company's total assets as of the end of last two completed fiscal years. A related person is any executive officer, director, nominee for director, or holder of 5% or more of the Company's Common Stock, or an immediate family member of any of those persons. Set forth below is a description of such related-party transactions that occurred during the transition period.

Certain of our directors and officers participated in private placements of our Common Stock in the 2015 Offer, the First 2016 Offering, and the Second 2016 Offering. Specifically:

- Our CEO, Jeffrey Shealy, purchased (i) 134,000 shares of Common Stock for an aggregate purchase price of \$201,000 (of which \$200,000 was paid by conversion of a convertible note) in the 2015 Offering, (ii) 93,750 shares of Common Stock for an aggregate purchase price of \$150,000 in the First 2016 Offering, and (iii) 20,000 shares of Common Stock for an aggregate purchase price of \$100,000 in the Second 2016 Offering.
- Steven P. DenBaars, one of our directors, purchased 17,000 shares of Common Stock for an aggregate purchase price of \$25,500 in the 2015 Offering.
- Mark Boomgarden, our Vice President of Operations, purchased (i) 17,000 shares of Common Stock for an aggregate purchase price of \$25,500 in the 2015 Offering, (ii) 6,250 shares of Common Stock for an aggregate purchase price of \$10,000 in the First 2016 Offering, and (iii) 2,000 shares of Common Stock for an aggregate purchase price of \$10,000 in the Second 2016 Offering.
- Jeffrey K. McMahon, one of our directors, purchased (i) 144,000 shares of Common Stock for an aggregate purchase price of \$216,000 (of which \$215,000 was paid by conversion of a convertible note) in the 2015 Offering and (ii) 35,000 shares of Common Stock for an aggregate purchase price of \$56,000 in the First 2016 Offering. In addition, in April 2015, Mr. McMahon purchased 21 pre-Merger shares of Akoustis, Inc. Common Stock (6,806 post-merger shares of Common Stock) for an aggregate purchase price of \$10,000 (paid by partial conversion of a convertible note).
- Jerry Neal, one of our directors and Co-Chairman of our Board of Directors, purchased 125,000 shares of Common Stock for an aggregate purchase price of \$200,000 in the First 2016 Offering and 200,000 shares of Common Stock for an aggregate purchase price of \$1,000,000 in the Second 2016 Offering.
- Arthur Geiss, one of our directors and Co-Chairman of our Board of Directors, purchased 10,000 shares of Common Stock for an aggregate purchase price of \$16,000 in the First 2016 Offering.



- Cindy Payne, our Chief Financial Officer, purchased 9,375 shares of Common Stock for an aggregate purchase price of \$15,000 in the First 2016 Offering.
- Dave Aichele, our VP of Business Development, purchased 6,250 shares of Common Stock for an aggregate purchase price of \$10,000.
- Rohan Houlden, our Divisional Vice President of Product Engineering, purchased 20,000 shares of Common Stock for an aggregate purchase price of \$100,000 in the Second 2016 Offering.

In addition, James R. Shealy, brother of our Chief Executive Officer, purchased 130,000 shares of Common Stock for an aggregate purchase price of \$135,000 (of which \$130,000 was paid by conversion of a convertible note) in the 2015 Offering, and he also purchased 10,000 shares of Common Stock for an aggregate purchase price of \$50,000 in the Second 2016 Offering. Michael J. Shealy, brother of our Chief Executive Officer, purchased 100,000 shares of Common Stock for an aggregate purchase price of \$150,000 in the 2015 Offering. Michael J. Shealy, brother of our Chief Executive Officer, purchased 100,000 shares of Common Stock for an aggregate purchase price of \$150,000 in the 2015 Offering.

Mark Tompkins, who beneficially owned approximately 2,385,706 shares of our Common Stock as of October 20, 2016, participated in the First 2016 Offering, purchasing 250,000 shares of Common Stock for \$400,000.

AEG Consulting, a firm owned and operated by Arthur Geiss, Co-Chairman of the Board, received \$4,050, \$4,012, and \$9,462 for consulting fees for the three months ended September 30, 2016, the three-month transition period ended June 30, 2016, and the twelve months ended March 31, 2016, respectively.

In March 2016, the Company purchased inventory from Big Red LLC ("Big Red"), a company formed by our CEO, Jeffrey Shealy, Richard Shealy, the brother of the Company's CEO, Mark Boomgarden, VP of Operations, and Greenstone, LLC. Specifically, the Company purchased amplifier inventory for \$44,000 so that the it could pursue commercialization of such inventory. The Company will use this inventory and related technology to process and sell amplifiers. Jeffrey Shealy and Mark Boomgarden assigned their interests in "Big Red" to other parties in March of 2016, including a small minority interest to one of our employees.

In April 2016, the Company entered into a license agreement with Big Red. The license agreement was executed so that the Company could pursue commercialization of the amplifier inventory purchased from Big Red in March 2016. The Company will utilize this inventory and related technology to process and sell the amplifiers. Future revenue from Company sales utilizing the amplifier technology will result in a license fee paid to Big Red according to the following schedule:

Net Sales	<b>Royalty Percentage</b>
\$0 - \$500,000	5.00%
\$500,000 - \$1,000,000	4.00%
\$1,000,000 - \$2,000,000	3.50%
2,000,000 - 5,000,000	3.00%
\$5,000,001 and over	2.00%

# PLAN OF DISTRIBUTION

The selling stockholders may, from time to time, sell any or all of their shares of our Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. If the shares of Common Stock are sold through underwriters, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. All selling stockholders who are broker-dealers are deemed to be underwriters. These sales may be at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- · ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- transactions other than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- short sales;
- · broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus, or they may engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades.

Broker-dealers engaged by the selling stockholders may arrange for other broker-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Any profits on the resale of shares of Common Stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by a selling stockholder. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

In connection with the sale of the shares of our Common Stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Common Stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of Common Stock short and deliver shares of Common Stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of Common Stock to broker-dealers that in turn may sell such shares.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of our Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of our Common Stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders also may transfer the shares of Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus and may sell the shares of Common Stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgees, transferees or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of Common Stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, such broker-dealers or agents and any profit realized on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Common Stock is made, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of Common Stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers. Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with. There can be no assurance that any selling stockholder will sell any or all of the shares of our Common Stock registered pursuant to the registration statement of which this prospectus forms a part.

Each selling stockholder has informed us that it does not have any agreement or understanding, directly or indirectly, with any person to distribute our Common Stock. None of the selling stockholders who are affiliates of broker-dealers, other than the initial purchasers in private transactions, purchased the shares of Common Stock outside of the ordinary course of business or, at the time of the purchase of the Common Stock, had any agreements, plans or understandings, directly or indirectly, with any person to distribute the securities.

We are required to pay all fees and expenses incident to the registration of the shares of Common Stock. Except as provided for indemnification of the selling stockholders, we are not obligated to pay any of the expenses of any attorney or other advisor engaged by a selling stockholder. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

If we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of Common Stock, we will file a post-effective amendment to the registration statement. If the selling stockholders use this prospectus for any sale of the shares of our Common Stock, they will be subject to the prospectus delivery requirements of the Securities Act.

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.

Our Common Stock is currently quoted on OTC Markets (OTCQB). In the last 12 months, the price of our Common Stock has ranged from less than \$5.00 per share to above \$5.00 per share; therefore, our Common Stock may be considered a "penny stock" and be subject to SEC rules and regulations which impose limitations upon the manner in which such shares may be publicly traded. These regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the associated risks. Under these regulations, certain brokers who recommend such securities to persons other than established customers or certain accredited investors must make a special written suitability determination regarding such a purchaser and receive such purchaser's written agreement to a transaction prior to sale. These regulations have the effect of limiting the trading activity of the Common Stock and reducing the liquidity of an investment in the Common Stock.

# **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 16,158,981 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.

#### Warrants

The 2015 Placement Agent Warrants entitled their holders to purchase 324,650 shares of Common Stock, with a term until June 2020 and an exercise price of \$1.50 per share, and have a "cashless" net exercise option. 2015 Placement Agent Warrants to purchase 317,984 shares of Common Stock remain outstanding as of December 12, 2016.

The 2016 Placement Agent Warrants entitle their holders to purchase 153,713 shares of Common Stock, with a term until April 2021 and an exercise price of \$1.60 per share, and have a "cashless" net exercise option. 2016 Placement Agent Warrants to purchase 153,714 shares of Common Stock remain outstanding as of December 12, 2016.

See "Registration Rights" below for a description of the registration rights granted to (among others) the holders of the Placement Agent Warrants, which description is incorporated herein by reference.

Copies of the Placement Agent Warrants are filed as exhibits to the registration statement of which this prospectus is a part.

# Options

Options to purchase an aggregate of 160,000 shares of our Common Stock were granted under our 2015 Equity Incentive Plan following the Merger to our four non-employee directors, with an exercise price of \$1.50 per share, vesting in equal annual installments over four years and exercisable until May 22, 2025.

# **Other Convertible Securities**

As of the date hereof, other than the securities described above, the Company does not have any outstanding convertible securities.

#### **Registration Rights**

## The 2015 Offering

In connection with the 2015 Offering, we entered into a Registration Rights Agreement, pursuant to which we agreed to file a registration statement with the SEC (the "2015 Registration Statement") covering (a) the shares of Common Stock issued in the 2015 Offering, (b) the shares of Common Stock issuable upon exercise of the 2015 Placement Agent Warrants, (c) any shares of Common Stock issuable to investors in the 2015 Offering pursuant to anti-dilution rights and (d) 1,863,504 additional shares of Common Stock held by two pre-Merger stockholders (the "2015 Registrable Shares"). The 2015 Registration Statement was declared effective by the SEC on October 20, 2015, and we filed a post-effective amendment to the 2015 Registration Statement concurrently with the filing of the registration statement of which this prospectus forms a part. The 2015 Registration Statement must be maintained until the earlier of two years from its effective date or until Rule 144 is available to the holders of all 2015 Registrable Shares without volume limitations.

With respect to (c) above, we registered 1,896,052 shares, which represented a good faith estimate as to the number of shares which may have become issuable upon application of the price-protected anti-dilution provision applicable to the shares referenced in (a) above (being the number of shares that would become issuable were we to trigger the application of the anti-dilution provision by issuing Common Stock or Common Stock equivalents at a price of \$1.00 per share). At the time of registration, we could not predict whether such anti-dilution provision would be triggered or the actual number of shares which would have become issuable were such provision to be triggered. The anti-dilution rights expired twelve months after the final closing of the 2015 Offering.

If (a) the 2015 Registration Statement ceases for any reason to remain effective during the period provided by the 2015 Registration Rights Agreement or the holders of 2015 Registrable Shares are otherwise not permitted to utilize the prospectus therein to resell the 2015 Registrable Shares for a period of more than fifteen consecutive trading days during such period; or (b) the 2015 Registrable Shares are not listed or included for quotation on OTC Markets, Nasdaq, the New York Stock Exchange or NYSE MKT, or trading of the Common Stock is suspended or halted for more than three consecutive trading days, the Company may be required to make payments to each holder of 2015 Registrable Shares as monetary penalties at a rate equal to 1% of the 2015 Offering Price per 30-day period for each share affected during the period of such failure; provided, however, that in no event will the aggregate of any such penalties exceed 8% of the 2015 Offering Price per share. No liquidated damages shall accrue after the 2015 Registrable Shares may be resold under Rule 144 under the Securities Act or another exemption from registration under the Securities Act. Stockholders have not been permitted to use the prospectus in the 2015 Registration Statement since August 2016. However, Rule 144 has generally been available to such stockholders. Once the post-effective amendment to the 2015 Registration Statement is declared effective by the SEC, stockholders may begin to use the prospectus included in such post-effective amendment.

The holders of 2015 Registrable Shares and the stockholders of the Company prior to the Merger (but not holders of the shares issued to the stockholders of Akoustis, Inc., in consideration for the Merger) were given "piggyback" registration rights for such 2015 Registrable Shares with respect to any registration statement filed by us following the effectiveness of the 2015 Registration Statement that would permit the inclusion of such shares, subject to customary cutback pro rata in an underwritten offering.

We will have paid or will pay all expenses in connection with any registration obligation provided in the 2015 Registration Rights Agreement, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of our counsel and of our independent accountants. Each investor will be responsible for its own sales commissions, if any, transfer taxes and the expenses of any attorney or other advisor such investor decides to employ.

## The First 2016 Offering

In connection with the First 2016 Offering, we entered into a Registration Rights Agreement, pursuant to which we agreed that promptly, but no later than 90 calendar days from the final closing of the First 2016 Offering, held April 16, 2016, the Company would file a registration statement with the SEC (the "2016 Registration Statement") covering the resale of (a) the shares of Common Stock issued in the First 2016 Offering and (b) any shares of Common Stock issuable to investors in the First 2016 Offering pursuant to the anti-dilution rights described under "Description of Business—The First 2016 Offering" above (the "2016 Registrable Shares"). The 2016 Registration Statement was declared effective by the SEC on July 22, 2016. With respect to (b) above, we registered 1,341,186 shares, which represented a good faith estimate as to the number of shares which may have become issuable upon application of the price-protected anti-dilution provision applicable to the shares referenced in (a) above (being the number of shares that would become issuable were we to trigger the application of the anti-dilution provision by issuing Common Stock or Common Stock equivalents at a price of \$1.00 per share). At the time of registration, we could not predict whether such anti-dilution provision would be triggered or the actual number of shares which would have become issuable were such provision to be triggered. The anti-dilution rights expired 90 days after the 2016 Registration Statement was declared effective by the SEC.

If (a) the 2016 Registration Statement ceases for any reason to remain effective or the holders of 2016 Registrable Shares are otherwise not permitted to utilize the prospectus therein to resell the 2016 Registrable Shares for a period of more than fifteen consecutive trading days; or (b) the Registrable Shares are not listed or included for quotation on OTC Markets, Nasdaq, the New York Stock Exchange or NYSE MKT, or trading of the Common Stock is suspended or halted for more than three consecutive trading days, the Company may be required make payments to each holder of 2016 Registrable Shares as monetary penalties at a rate equal to 12% of the First 2016 Offering Price per annum for each share affected during the period of such failure; provided, however, that in no event will the aggregate of any such penalties exceed 8% of the First 2016 Offering Price per share. No liquidated damages shall accrue with respect to any 2016 Registrable Shares after the shares may be resold under Rule 144 under the Securities Act or another exemption from registration under the Securities Act.

The Company must keep the 2016 Registration Statement effective until the earlier of (i) two years from the date it was declared effective by the SEC and (ii) the date Rule 144 is available to the holders of 2016 Registrable Shares with respect to all of their 2016 Registrable Shares without volume or other limitations. The registration statement of which this post-effective amendment forms a part will update the 2016 Registration Statement and the prospectus included therein.

The holders of 2016 Registrable Shares have "piggyback" registration rights for such 2016 Registrable Shares with respect to up to two registration statements filed by the Company following the effectiveness of the 2016 Registration Statement that would permit the inclusion of such shares, subject to customary cutback pro rata in an underwritten offering.



We will have paid or will pay all expenses in connection with any registration obligation provided in the 2016 Registration Rights Agreement, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of our counsel and of our independent accountants. Each investor will be responsible for its own sales commissions, if any, transfer taxes and the expenses of any attorney or other advisor such investor decides to employ.

## The Second 2016 Offering

In connection with the Second 2016 Offering, we entered into a Registration Rights Agreement, pursuant to which we have agreed that within 90 calendar days from the final closing of the Second 2016 Offering, the Company will file a registration statement with the SEC (the "New Registration Statement") covering the resale of (a) the shares of Common Stock issued in the Second 2016 Offering and (b) any shares of Common Stock issuable to investors in the Second 2016 Offering pursuant to the anti-dilution rights described under "Description of Business —The Second 2016 Offering" above (the "New Registrable Shares"). We have not yet filed the New Registration Statement.

The Company must use its commercially reasonable efforts to ensure that the New Registration Statement is declared effective within 180 calendar days after filing with the SEC. If (a) the Company is late in filing the New Registration Statement, (b) the New Registration Statement ceases for any reason to remain effective or the holders of New Registrable Shares are otherwise not permitted to utilize the prospectus therein to resell the New Registrable Shares for a period of more than fifteen consecutive trading days; or (c) the New Registrable Shares are not listed or included for quotation on OTC Markets, Nasdaq, the New York Stock Exchange or NYSE MKT, or trading of the Common Stock is suspended or halted for more than three consecutive trading days, the Company will make payments to each holder of New Registrable Shares as monetary penalties at a rate equal to 12% of the Second 2016 Offering Price per annum for each share affected during the period of such failure; provided, however, that in no event will the aggregate of any such penalties exceed 8% of the Second 2016 Offering Price per share. No liquidated damages shall accrue with respect to any New Registrable Shares removed from the New Registration Statement in response to a comment from the staff of the SEC limiting the number of shares of Common Stock which may be included in the New Registration Statement (a "Cutback Comment") or after the shares may be resold under Rule 144 under the Securities Act or another exemption from registration under the Securities Act.

The Company must keep the New Registration Statement effective until the earlier of (i) two years from the date it is declared effective by the SEC and (ii) the date Rule 144 is available to the holders of New Registrable Shares with respect to all of their New Registrable Shares without volume or other limitations.

The holders of New Registrable Shares (including any shares of Common Stock removed from the New Registration Statement as a result of a Cutback Comment) will have "piggyback" registration rights for such New Registrable Shares with respect to up to two registration statements filed by the Company following the effectiveness of the New Registration Statement that would permit the inclusion of such shares, subject to customary cutback pro rata in an underwritten offering.

We will pay all expenses in connection with any registration obligation provided in the Registration Rights Agreement, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of our counsel and of our independent accountants. Each investor will be responsible for its own sales commissions, if any, transfer taxes and the expenses of any attorney or other advisor such investor decides to employ.

# The Registration Rights Agreements referred to above are filed as exhibits to the registration statement of which this prospectus is a part.

## Lock-up Agreements and Other Restrictions

In connection with the Merger, each of our executive officers and directors, and each of the stockholders of Akoustis, Inc., who received shares of our Common Stock in the Merger (each a "Restricted Holder", and, collectively, the "Restricted Holders"), holding at the time of the Merger an aggregate 5,734,006 shares of our Common Stock, entered into agreements (the "Lock-Up Agreements"), whereby they are restricted for a period of 24 months after the Merger from certain sales or dispositions of our Common Stock held by them immediately after the Merger (the "Lock-Up"). The Lock-Up excludes shares of Common Stock purchased by the Restricted Holders in the 2015 Offering, other than our Chief Executive Officer, and shares purchased in the open market in compliance with applicable securities laws.

In addition, each Restricted Holder has agreed in the Lock-Up Agreement that it will not, for a period of 24 months following the Merger, directly or indirectly, effect or agree to effect any short sale (as defined in Rule 200 under Regulation SHO of the Exchange Act), whether or not against the box, establish any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) with respect to the Common Stock, borrow or pre-borrow any shares of Common Stock, or grant any other right (including, without limitation, any put or call option) with respect to the Common Stock or with respect to any security that includes, relates to or derives any significant part of its value from the Common Stock or otherwise seek to hedge its position in the Common Stock.

#### **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.

## LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for us by Womble Carlyle Sandridge & Rice, LLP, Washington, D.C.

#### **EXPERTS**

The consolidated financial statements of Akoustis Technologies, Inc. as of June 30, 2016 and 2015, and March 31, 2016 and 2015 and for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, and the year ended March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015, included in this prospectus and the registration statement of which this prospectus forms a part, have been audited by Marcum LLP, independent registered public accounting firm, as set forth in their 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) appearing elsewhere herein, and are included in reliance on such report given upon such firm's authority as an expert in auditing and accounting.

## 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., Room 1580, 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-1 under the Securities Act to register the shares offered by this prospectus. The term "registration statement" means the original registration statement and any and all amendments thereto, including the schedules and exhibits to the original registration statement or any amendment. This prospectus is part of that registration statement. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares being offered pursuant to this prospectus, you should refer to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC's public reference facilities and Internet sites referred to above.

The information found on, or otherwise accessible through, any website referenced in this prospectus is not incorporated into, and does not form a part of, this prospectus.

# INDEX TO FINANCIAL STATEMENTS

	Page
Unaudited Condensed Consolidated Financial Statements of Akoustis Technologies, Inc.	
Condensed Consolidated Balance Sheets as of September 30, 2016 and June 30, 2016	F-2
Condensed Consolidated Statements of Operations for the three months ended September 30, 2016 and 2015	F-3
Condensed Consolidated Statement of Changes in Stockholders' Equity for the three months ended September 30, 2016	F-4
Condensed Consolidated Statements of Cash Flows for the three months ended September 30, 2016 and 2015	F-5
Notes to the Condensed Consolidated Financial Statements	F-6
AUDITED CONSOLIDATED FINANCIAL STATEMENTS OF AKOUSTIS TECHNOLOGIES, INC.	
Report of Independent Registered Public Accounting Firm	F-15
Consolidated Balance Sheets as of June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2016	F-16
Consolidated Statements of Operations for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, the year ended March 31, 2016 and for the period from May 12, 2014 (inception) through March 31, 2015	F-17
Consolidated Statement of Changes in Stockholders' Equity for the period from May 12, 2014 (inception) through June 30, 2016	F-18
Consolidated Statements of Cash Flows for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, the year ended March 31, 2016 and for the period from May 12, 2014 (inception) through March 31, 2015	F-19
Notes to the Consolidated Financial Statements	F-20

# Akoustis Technologies, Inc. Condensed Consolidated Balance Sheets

	September 30, 2016 (unaudited)			June 30, 2016
Assets				
Assets:				
Cash and cash equivalents	\$	3,054,308	\$	4,155,444
Inventory	-	43,544	+	43,544
Prepaid expenses		93,699		54,818
Total current assets		3,191,551		4,253,806
Property and equipment, net		214,393		206,985
Intangibles, net		83,607		71,233
Other assets		130,715		10,715
Total Assets	\$	3,620,266	\$	4,542,739
Liabilities and Stockholders' Equity				
Current Liabilities:				
Accounts payable and accrued expenses	\$	837,116	\$	543,646
Total current liabilities		837,116	_	543,646
Long-term Liabilities:				
Derivative liabilities		1,479,945		1,322,729
Total Liabilities		2,317,061		1,866,375
Commitments and contingencies				
Stockholders' Equity				
Preferred Stock, par value \$0.001: 10,000,000 shares authorized; none issued and outstanding		-		-
Common stock, \$0.001 par value; 300,000,000 shares authorized; 15,828,981 and 15,375,981 shares				
issued and outstanding at September 30, 2016 and June 30, 2016, respectively		15,829		15,376
Additional paid in capital		10,035,134		9,335,801
Accumulated deficit		(8,747,758)	_	(6,674,813)
Total Stockholders' Equity		1,303,205		2,676,364
Total Liabilities and Stockholders' Equity	\$	3,620,266	\$	4,542,739

See accompanying notes to the consolidated financial statements

# Akoustis Technologies, Inc. Condensed Consolidated Statements of Operations

		eptember 30, 2016	For the Three Months Ended September 30, 2015 (unaudited)		
		(unaudited)			
Revenue		-	\$	-	
Operating expenses					
Research and development		652,576		321,720	
General and administrative expenses		1,263,243		761,323	
Total operating expenses		1,915,819		1,083,043	
Loss from operations		(1,915,819)		(1,083,043)	
Other income (expense)					
Interest income		90		496	
Change in fair value of derivative liabilities		(157,216)		14,015	
Total other income (expense)		(157,126)		14,511	
Net loss	\$	(2,072,945)	\$	(1,068,532)	
Net loss per common share - basic and diluted	\$	(0.13)	\$	(0.09)	
Weighted average common shares outstanding -basic and diluted		15,701,709		12,392,115	

See accompanying notes to the consolidated financial statements

# Akoustis Technologies, Inc. Condensed Consolidated Statement of Changes in Stockholders' Equity For the Three Months Ended September 30, 2016 (unaudited)

	Common Stock		Additional		Accumulated				
	Shares		Amount	Pa	id In Capital		Deficit	Stockholders	s' Equity
Balance, July 1, 2016	15,375,981	\$	15,376	\$	9,335,801	\$	(6,674,813)	\$ 2	,676,364
Common stock issued for services	453,000		453		629,310		-		629,763
Vesting of restricted shares	-		-		70.023		-		70,023
5									
Net loss for the three months ended September 30, 2016			_		-		(2,072,945)	(2	,072,945)
Balance, September 30, 2016	15,828,981	\$	15,829	\$	10,035,134	\$	(8,747,758)	\$ 1	,303,205

See accompanying notes to the consolidated financial statements

# Akoustis Technologies, Inc. Condensed Consolidated Statements of Cash Flows

		e Three Months Ended eptember 30, 2016 (unaudited)	For the Three Months Ended September 30, 2015 (unaudited)			
		. ,		· · ·		
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net loss	\$	(2,072,945)	\$	(1,068,532)		
Adjustments to reconcile net loss to net cash used in operating activities:						
Depreciation		12,885		4,530		
Amortization of intangibles		1,350		1,034		
Share-based compensation		704,220		65,725		
Change in fair value of derivative liabilities		157,216		(14,015)		
Changes in operating assets and liabilities:						
Prepaid expenses		(38,881)		5,190		
Other assets		(120,000)		(8,100)		
Accounts payable and accrued expenses		289,036		217,923		
Net Cash Used In Operating Activities		(1,067,119)		(796,245)		
CASH FLOWS FROM INVESTING ACTIVITIES:						
		(20, 202)		(102.057)		
Cash paid for machinery and equipment		(20,293)		(103,957)		
Cash paid for intangibles		(13,724)		(14,873)		
Net Cash Used In Investing Activities		(34,017)		(118,830)		
Net Decrease in Cash		(1,101,136)		(915,075)		
Cash - Beginning of Period		4,155,444		4,329,496		
Cash - End of Period	\$	3,054,308	\$	3,414,421		
SUPPLEMENTARY CASH FLOW INFORMATION:						
Cash Paid During the Period for:						
Income taxes	\$	-	\$	-		
Interest	\$		\$			
SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:						
Stock compensation payable	\$	74,457	\$	37,450		
store compensation paymore	φ	/4,43/	φ	57,430		

See accompanying notes to the consolidated financial statements

# AKOUSTIS TECHNOLOGIES, INC. Notes to the Condensed Consolidated Financial Statements (Unaudited)

#### September 30, 2016

## Note 1. Organization

Akoustis Technologies, Inc. (formerly known as Danlax, Corp.) ("the Company") was incorporated under the laws of the State of Nevada, U.S. on April 10, 2013. On May 22, 2015, our wholly owned subsidiary, Akoustis Acquisition Corp., a corporation formed in the State of Delaware on May 15, 2015 ("Acquisition Sub"), merged with and into Akoustis, Inc., a Delaware corporation. Akoustis, Inc. was the surviving corporation in the merger and became our wholly owned subsidiary. Through its subsidiary, Akoustis, Inc., the Company operates in the telecommunications and fiber optics sector and is based in Huntersville, North Carolina. The mission of the Company is to commercialize and manufacture its patent-pending BulkOne acoustic wave technology to address the critical frequency-selectivity requirements in today's mobile smartphones - improving the efficiency and signal quality of mobile wireless devices and enabling the Internet of Things.

On August 11, 2016, the Company changed its fiscal year from the period beginning on April 1 and ending on March 31 to the period beginning on July 1 and ending on June 30 of each year, effective immediately.

#### Note 2. Going Concern and Management Plans

The accompanying condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As of September 30, 2016, the Company had a working capital of \$2,354,435 and an accumulated deficit of \$8,747,758. The Company has not generated any revenues from operations and incurred net losses since inception. As of September 30, 2016, the Company had cash and cash equivalents of \$3,054,308. The Company estimates the \$3.8 million of cash and cash equivalents currently on hand as of December 12, 2016 is sufficient to fund its operations through June 30, 2017. In order to fund operations past that date, we will need to raise further capital, through the sale of additional equity securities, through additional grants, or otherwise, to support our future operations. There is no assurance that the Company's projections and estimates are accurate. Although the Company is actively managing and controlling the Company's cash outflows to mitigate these risks, these matters raise substantial doubt about the Company's ability to continue as a going concern. The condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

The Company's primary sources of operating funds since inception have been private equity, note financings and grants. The Company intends to raise additional capital through private debt and equity investors. The Company needs to raise additional capital to be able to accomplish its business plan objectives and is continuing its efforts to secure additional funds through debt or equity instruments and grants. Management believes that it will be successful in obtaining additional financing based on its history of raising funds; however, no assurance can be provided that the Company will be able to do so. There is no assurance that any funds it raises will be sufficient to enable the Company to attain profitable operations or continue as a going concern. To the extent that the Company is unsuccessful, the Company may need to curtail or cease its operations and implement a plan to extend payables or reduce overhead until sufficient additional capital is raised to support further operations. There can be no assurance that such a plan will be successful.

## Note 3. Summary of significant accounting policies

## **Basis of presentation**

The Company's condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and the rules and regulations of the SEC.

The unaudited condensed consolidated financial information furnished herein reflects all adjustments, consisting solely of normal recurring items, which in the opinion of management are necessary to fairly state the financial position of the Company and the results of its operations for the periods presented. The Company assumes that the users of the interim financial information herein have read or have access to the audited financial statements for the preceding fiscal year and that the adequacy of additional disclosure needed for a fair presentation may be determined in that context. Accordingly, footnote disclosure, which would substantially duplicate the disclosure contained in the Company's Transition Report on Form 10-K for the three months and year ended June 30, 2016 filed on October 31, 2016 (the "2016 Annual Report"). The results of operations for the interim periods presented are not necessarily indicative of results for the entire fiscal year ending June 30, 2017 or any other period.

# **Principles of Consolidation**

The accompanying condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Akoustis, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation.

# **Significant Accounting Policies and Estimates**

The Company's significant accounting policies are disclosed in Note 3-Summary of Significant Accounting Policies in the 2016 Annual Report. Since the date of the 2016 Annual Report, there have been no material changes to the Company's significant accounting policies. The preparation of the condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and the accompanying notes to the condensed consolidated financial statements. These estimates and assumptions include valuing equity securities and derivative financial instruments issued in financing transactions, deferred taxes and related valuation allowances, and the fair values of long lived assets. Actual results could differ from the estimates.

# Loss Per Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of common stock equivalents. In periods when losses are reported, which is the case for the three months ended September 30, 2016 and 2015 presented in these condensed consolidated financial statements, the weighted-average number of common shares outstanding excludes common stock equivalents because their inclusion would be anti-dilutive.

The Company had the following common stock equivalents at September 30, 2016 and 2015:

	September 30, 2016	September 30, 2015
Options	160,000	160,000
Warrants	471,697	324,650
Totals	631,697	484,650

#### Shares outstanding

Shares outstanding include shares of restricted stock with respect to which restrictions have not lapsed. Restricted stock included in reportable shares outstanding was 1,834,055 shares and 623,855 shares as of September 30, 2016 and 2015, respectively. Shares of restricted stock are included in the calculation of weighted average shares outstanding.

#### **Recently Issued Accounting Pronouncements**

Management does not believe that any recently issued, but not yet effective accounting pronouncements, when adopted, will have a material effect on the accompanying consolidated financial statements.

#### Note 4. Property and equipment

Property and equipment consisted of the following:

	Estimated Useful Life	September 30, 2016		,	June 30, 2016
Research and development equipment	3-10 years	\$	246,665	\$	226,372
Computer equipment	5 years		16,783		16,783
Furniture and fixtures	5-10 years		3,725		3,725
Leasehold improvements	*		3,240		3,240
			270,413		250,120
Less: Accumulated depreciation			(56,020)		(43,135)
Total		\$	214,393	\$	206,985



(\*) Amortized on a straight-line basis over the term of the lease or the estimated useful lives, whichever is shorter.

The Company recorded depreciation expense of \$12,885 and \$4,530 for the three months ended September 30, 2016 and 2015, respectively.

As of September 30, 2016, research and development fixed assets totaling \$6,505 were not placed in service and therefore not depreciated during the period.

# Note 5. Intangible assets

The Company's intangible assets consisted of the following:

	Estimated				
	useful life	Septem	1ber 30, 2016	Jun	e 30, 2016
Patents	15 years	\$	88,286	\$	74,562
Less: Accumulated amortization			(6,239)		(4,889)
Subtotal			82,047		69,673
Trademarks	—		1,560		1,560
Intangible assets, net		\$	83,607	\$	71,233

The Company recorded amortization expense of \$1,350 and \$1,034 for three months ended September 30, 2016 and 2015, respectively.

The following table outlines estimated future annual amortization expense for the next five years and thereafter:

September 30,	
2017	\$ 5,836
2018	5,836
2019	5,836
2020	5,836
2021	5,836
Thereafter	52,867
	\$ 82,047

## Note 6. Accounts payable and accrued expenses

Accounts payable and accrued expenses consisted of the following at September 30, 2016 and June 30, 2016:

	Septen	nber 30, 2016	Jun	ie 30,2016
Accounts payable	\$	149,940	\$	73,400
Accrued salaries and benefits		60,975		21,376
Accrued bonuses		259,542		126,575
Accrued stock-based compensation		183,513		179,079
Other accrued expenses		183,146		143,216
Totals	\$	837,116	\$	543,646

## Note 7. Derivative Liabilities

Upon closing of private placements on May 22, 2015 and June 9, 2015, the Company issued 298,551 and 26,099 warrants, respectively, to purchase the same number of shares of common stock with an exercise price of \$1.50 and a five-year term to the placement agent. Upon closing of a private placement in April 2016, the Company issued 153,713 warrants to purchase the same number of shares of common stock with an exercise price of \$1.60 and a five-year term to the placement agent. The Company identified certain put features embedded in the warrants that potentially could result in a net cash settlement, requiring the Company to classify the warrants as a derivative liability.

#### Level 3 Financial Liabilities – Derivative warrant liabilities

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the condensed consolidated balance sheet as of September 30, 2016:

	(	Carrying Fair Value Measurement Using						ment Using	
		Value		Level 1		Level 2		Level 3	 Total
Derivative warrant liabilities	\$	1,479,945	\$		\$		\$	1,479,945	\$ 1,479,945

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the consolidated balance sheet as of June 30, 2016:

	Carrying			Carrying Fair Value Measurement Using							
		Value		Level 1		Level 2		Level 3		Total	
Derivative warrant liabilities	\$	1,322,729	\$		\$		\$	1,322,729	\$	1,322,729	

The table below provides a summary of the changes in fair value, including net transfers in and/or out, of all financial assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the three months ended September 30, 2016:

	Fair Value Measurement Using Level 3 Inputs
	Total
Balance, July 1, 2016	\$ 1,322,729
Change in fair value of derivative warrant liabilities	157,216
Balance, September 30, 2016	\$ 1,479,945

The fair value of the derivative feature of the warrants on the issuance dates and at the balance sheet date were calculated using a binomial option model valued with the following weighted average assumptions:

	September 30, 2016	June 30, 2016
Risk free interest rate	1.01 to 1.14%	1.01%
Dividend yield	0.00%	0.00%
Expected volatility	65%	39%
Remaining term (years)	3.64 - 4.54	3.89-4.79

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Note with a similar term on the date of the grant.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

Volatility: The Company calculates the expected volatility of the stock price based on the corresponding volatility of the Company's peer group stock price for a period consistent with the warrants' expected term.

Remaining term: The Company's remaining term is based on the remaining contractual maturity of the warrants.

During the three months ended September 30, 2016 and 2015, the Company marked the derivative feature of the warrants to fair value and recorded a loss of \$157,216 and a gain of \$14,015, respectively, relating to the change in fair value.

## Note 8. Stockholders' Equity

The Company recorded stock-based compensation expense for the shares issued to consultants that have vested, which is a component of general and administrative expenses in the Consolidated Statement of Operations as follows:

		Stock Based Compensation For the Three Months Ender					
Month of Original Grant	Shares Issued	September 30, 2016	September 30, 2015				
December 2015	230,000	\$ 166,957	\$-				
March 2016	60,000	46,127	-				
August 2016	40,000	147,600	-				
	330,000	\$ 360,684	\$-				

As of September 30, 2016 and June 30, 2016, the Company had 15,828,981 and 15,375,981 common shares issued and outstanding, respectively.

## Stock incentive plan

The following is a summary of the option activity:

	Options	Weighted Average Exercise Price		
Outstanding – June 30, 2016	160,000	\$	1.50	
Exercisable – June 30, 2016	40,000	\$	1.50	
Granted				
Exercised			_	
Forfeited/Cancelled				
Outstanding – September 30, 2016	160,000	\$	1.50	
Exercisable – September 30, 2016	40,000	\$	1.50	

As of September 30, 2016, the total intrinsic value of options outstanding and exercisable was \$444,800 and \$111,200, respectively. As of September 30, 2016, the Company has \$73,692 in unrecognized stock-based compensation expense attributable to the outstanding options which will be amortized over a period of 2.64 years.

For the three months ended September 30, 2016 and 2015, the Company recorded \$7,040 and \$7,040, respectively, in stock-based compensation related to stock options, which is reflected in the condensed consolidated statements of operations.

#### Issuance of restricted shares - employees and consultants

Restricted stock awards are considered outstanding at the time of execution by the Company and the recipient of a restricted stock agreement, as the stock award holders are entitled to dividend and voting rights. As of September 30, 2016, the number of shares granted for which the restrictions have not lapsed was 1,307,836 shares.

The Company recognizes the compensation expense for all share-based compensation granted based on the grant date fair value. The grant date fair value of the award is recorded as share-based compensation expense over the respective restriction period. Any portion of the grant awarded to consultants as to which the repurchase option has not lapsed is accrued on the Balance Sheet as a component of accounts payable and accrued expenses. As of September 30, 2016 and June 30, 2016, the accrued stock-based compensation was \$183,513 and \$179,079, respectively. The Company has the right to repurchase some or all of such shares upon termination of the individual's service with the Company, whether voluntary or involuntary, for 60 months from the date of termination ("repurchase option"). The shares as to which the repurchase option has not lapsed are subject to forfeiture upon termination of consulting and employment agreements.



In September 2015, the Company amended the original restricted stock agreement for certain award recipients. According to the amendment, 75% of the shares as to which the repurchase option had not lapsed as of September 30, 2015 shall be released from the repurchase option on the third anniversary of the original effective date of the agreement. The remaining 25% of the shares shall be released from the repurchase option on the fourth anniversary of the original effective date.

The following is a summary of restricted shares:

Grant Date	Shares Issued	Fair Value	Shares Vested
June 2014	307,876	\$ 633,297	96,211
July 2014	32,408	2,090	9,452
August 2014	81,020	205,016	28,020
September 2014	129,633	256,718	32,408
March 2015	72,918	228,960	10,128
June 2015	293,000	439,500	-
November 2015	36,200	54,300	-
December 2015	300,000	1,089,400	230,000
January 2016	40,000	68,000	-
March 2016	60,000	256,800	60,000
June 2016	188,000	516,920	-
August 2016	343,000	1,415,960	40,000
	1,814,055	\$ 5,166,961	506,219

In relation to the above restricted stock agreements for the three months ended September 30, 2016 and 2015, the Company recorded stock-based compensation expense for the shares that have vested of \$697,180 and \$58,685, respectively.

As of September 30, 2016, the Company had \$3,553,091 in unrecognized stock based compensation expense related to the unvested shares.

## Note 9. Commitments

#### **Operating leases**

The Company leases office space in Huntersville, NC pursuant to a three year lease agreement. The operating lease provide for annual real estate tax and cost of living increases and contain predetermined increases in the rentals payable during the term of the lease. The aggregate rent expense is recognized on a straight-line basis over the lease term. The total lease rental expense was \$14,202 and \$13,788 for the three months ended September 30, 2016 and 2015, respectively.

Total future minimum payments required under the new operating lease are as follows.

Year Ending June 30,	
2017	\$ 47,555
2018	28,220
	\$ 75,775

#### Note 10. Related Party Transactions

#### **Consulting Services**

AEG Consulting, a firm owned by one of our Co-Chairmen, received \$4,050 and \$750 for consulting fees for the three months ended September 30, 2016 and 2015, respectively.

### Note 11. Subsequent Events

On November 25, 2016, the Company held a closing of a private placement offering (the "Second 2016 Offering") in which we sold 322,000 shares of our Common Stock at a fixed purchase price of \$5.00 per share (the "Second 2016 Offering Price"), for aggregate gross proceeds of \$1,610,000 (before deducting expenses of the Second 2016 Offering). We did not engage or pay any placement agents or brokers in connection with the Second 2016 Offering.

Investors in the Second 2016 Offering were given anti-dilution protection with respect to the shares of Common Stock purchased in the Second 2016 Offering for the period from November 25, 2016 until 90 days after the date on which the registration statement that we are required to file under a Registration Rights Agreement with the investors is declared effective by the SEC. We have not yet filed such registration statement with the SEC. Pursuant to the anti-dilution rights, if we issue additional shares of Common Stock or Common Stock equivalents (subject to customary exceptions, including but not limited to issuances of awards under the Company's 2016 Stock Incentive Plan and certain issuances of securities in connection with credit arrangements, equipment financings, lease arrangements or similar transactions) for a consideration per share less than the Second 2016 Offering Price (as adjusted for any subsequent stock dividend, stock split, distribution, recapitalization, reclassification, reorganization or similar event) (the "Lower Price"), each investor in the Second 2016 Offering will be entitled to receive from the Company additional shares of Common Stock in an amount such that, when added to the number of shares of Common Stock initially purchased by such investor, will equal the number of shares of Common Stock that such investor's offering subscription amount would have purchased at the Lower Price.

On December 15, 2016, the Company's stockholders approved the reincorporation of the Company from the State of Nevada to the State of Delaware, pursuant to a plan of conversion. On the same day, the Company filed Articles of Conversion with the Secretary of State in the State of Nevada and a Certificate of Conversion and Certificate of Incorporation with the Secretary of State in the State of Delaware. As a result, on December 15, 2016, the Company converted into a Delaware corporation. In connection with the reincorporation, the number of shares of capital stock the Company is authorized to issue was reduced from 300 million shares of Common Stock and 10 million shares of preferred stock to 45 million shares of Common Stock and 5 million shares of preferred stock.

#### **Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of Akoustis Technologies, Inc.

We have audited the accompanying consolidated balance sheets of Akoustis Technologies, Inc. (the "Company") as of June 30, 2016 and 2015, and March 31, 2016 and 2015, and the related consolidated statements of operations and cash flows for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, the year ended March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015, and the consolidated statement of changes in stockholders' equity for the period from May 12, 2014 (inception) through June 30, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Akoustis Technologies, Inc., as of June 30, 2016 and 2015, and March 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, the year ended March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has not generated any revenue, and has incurred losses since inception. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Marcum llp

Marcum llp New York, NY October 31, 2016



# Akoustis Technologies, Inc. Consolidated Balance Sheets

	June 30, 2016	June 30, 2015		March 31, 2016		N	Iarch 31, 2015
Assets							
Assets:							
Cash and cash equivalents	\$ 4,155,444	\$	4,329,496	\$	2,730,105	\$	687,739
Inventory	43,544		-		43,544		30,521
Prepaid expenses	54,818		59,812		59,461		19,000
Total current assets	4,253,806		4,389,308		2,833,110		737,260
Property and equipment, net	206,985		81,641		182,910		65,512
Intangibles, net	71,233		31,077		60,649		26,966
Other assets	10,715	_	10,715		10,715		2,715
Total Assets	\$ 4,542,739	\$	4,512,741	\$	3,087,384	\$	832,453
Liabilities and Stockholders' Equity							
Current Liabilities:							
Accounts payable and accrued expenses	\$ 543,646	\$	122,514	\$	367,290	\$	58,439
Convertible notes payable	 -		-		-		655,000
Total current liabilities	 543,646		122,514		367,290		713,439
Long-term Liabilities:							
Derivative liabilities	1,322,729		205,144		313,709		-
	 <u> </u>						
Total Liabilities	 1,866,375		327,658		680,999		713,439
Commitments and contingencies							
Stockholders' Equity							
Preferred Stock, par value \$0.001: 10,000,000 shares authorized; none issued and outstanding	-		-		-		-
Common stock, \$0.001 par value; 300,000,000 shares authorized; 15,375,981, 12,469,084, 13,615,440 and 5,493,200 shares issued and outstanding at June 30, 2016, June 30, 2015, March 31, 2016							
and March 31, 2015, respectively	15,376		12,469		13,615		5,493
Additional paid in capital	9,335,801		5,441,260		6,549,946		559,870
Accumulated deficit	(6,674,813)		(1,268,646)		(4,157,176)		(446,349)
Total Stockholders' Equity	2,676,364		4,185,083		2,406,385		119,014
Total Liabilities and Stockholders' Equity	\$ 4,542,739	\$	4,512,741	\$	3,087,384	\$	832,453

See accompanying notes to the consolidated financial statements

# Akoustis Technologies, Inc. Consolidated Statements of Operations

	For the Three Month Ended June 30, 2016	For the Yea Ended June 30, 201	Ended	For the Year Ended March 31, 2016	For the Period from May 12, 2014 (Inception) through March 31, 2015
Revenue	\$	- \$	- \$ -	\$ -	\$ -
Operating expenses					
Research and development	709,31	4 1,758,70	)1 470,987	1,222,194	244,635
General and administrative	· · · · j-	,,.		, , , -	,
expenses	968,73	4 2,935,29	99 920,031	2,647,800	339,214
Total operating expenses	1,678,04				583,849
Loss from operations	(1,678,04	8) (4,694,00	)0) (1,391,018	) (3,869,994)	(583,849)
Other income (expense)					
Grant income	20,50	0 254,83	34 167,499	264,333	137,500
Other income		- 50	- 00	500	-
Interest income	18	6 1,33	39 175	1,328	-
Change in fair value of derivative					
liabilities	(860,27	5) (968,84	1,571	(106,994)	
Total other income (expense)	(839,58	9) (712,10	67) 169,245	159,167	137,500
Net loss	\$ (2,517,63	7) <u>\$ (5,406,10</u>	57) \$ (1,221,773	) <u>\$ (3,710,827)</u>	\$ (446,349)
Net loss per common share - basic					
and diluted	\$ (0.1	7) \$ (0.4	10) \$ (0.20	) <u>\$ (0.32</u> )	\$ (0.08)
Weighted average common shares outstanding-basic and diluted	15,111,08	8 13,349,48	6,240,780	11,702,313	5,493,200

See accompanying notes to the consolidated financial statements

F-17

# Akoustis Technologies, Inc. Consolidated Statement of Changes in Stockholders' Equity For the Period from May 12, 2014 (Inception) through June 30, 2016

-	Commo Shares	on Stock Amount	Additional <u>Paid In Capital</u>	Accumulated Deficit	Stockholders' Equity
Balance May 12, 2014 (Inception)	-	\$-	\$-	\$ -	\$-
Common stock issued to founders	3,017,203	3,016	(3,015)	-	1
Common stock issued for cash	134,504	135	34,865	-	35,000
Preferred shares issued for cash	1,717,635	1,718	528,282	-	530,000
Common stock issued for services	623,858	624	(262)	-	362
Net loss for the period May 12, 2014					
(Inception) to March 31, 2015 Balance, March 31, 2015	5,493,200	5,493	- 559,870	(446,349) (446,349)	(446,349) 119,014
Balance, March 51, 2015	5,495,200	5,495	559,870	(440,549)	119,014
Common stock issued for cash, net of issuance costs	3,362,104	3,362	4,238,265	-	4,241,627
Warrants issued to underwriter	-	-	(206,715)	-	(206,715)
Common stock issued upon conversion of notes	436,806	437	654,563		655,000
Recapitalization	3,000,005	3,000	(3,000)	-	-
Common stock issued for services	176,969	177	198,277	-	198,454
Net loss for the period April 1, 2015 to June 30, 2015	_	-	-	(822,297)	(822,297)
Balance, June 30, 2015	12,469,084	12,469	5,441,260	(1,268,646)	4,185,083
Common stock issued for cash, net of	404 125	40.4	7(0.102		7(0,(07
issuance costs	494,125	494	769,193	-	769,687
Common stock issued for services	652,231	652	339,493	-	340,145
Net loss for the period July 1, 2015 to March 31, 2016					
-	-	-	-	(2,888,530)	
Balance, March 31, 2016	13,615,440	13,615	6,549,946	(4,157,176)	2,406,385
Common stock issued for cash, net of issuance costs	1,745,875	1,746	2,561,150	-	2,562,896
Warrants issued to underwriter	-	-	(165,719)	-	(165,719)
Common stock issued for services	8,000	8	363,457	-	363,465
Issuance of common stock from exercise of warrants	6,666	7	9,993	-	10,000
Transfer of warrant derivatives from liability to equity classification	-	-	16,974	-	16,974
Net loss for the three months ended June 30, 2016				(2517627)	(2517627)
Balance, June 30, 2016	- 15,375,981	\$ 15,376	\$ 9,335,801	$\frac{(2,517,637)}{\$  (6,674,813)}$	(2,517,637) \$ 2,676,364
=	15,575,901	φ 13,370	\$ 9,555,601	Ψ (0,074,013)	φ 2,070,304

See accompanying notes to the consolidated financial statements

# Akoustis Technologies, Inc. Consolidated Statements of Cash Flows

	For the Three Months Ended June 30, 2016	For the Year Ended June 30, 2016	For the Year Ended June 30, 2015	For the Year Ended March 31, 2016	For the Period from May 12, 2014 (Inception) through March 31, 2015
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net loss	\$ (2,517,637)	\$ (5,406,167)	\$ (1,221,773)	\$ (3,710,827)	\$ (446,349)
Adjustments to reconcile net loss to net cash used in operating activities:	• (2,017,007)	¢ (0,100,107)	¢ (1,221,773)	• (0,110,027)	• (110,515)
Depreciation	11,425	34,828	8,090	26,035	5,675
Amortization of intangibles	1,131	3,339	1,550	2,714	1,044
Share-based compensation	435,642	849,625	231,909	639,644	6,219
Change in fair value of derivative liabilities	860,275	968,840	(1,571)	106,994	-
Changes in operating assets and liabilities:					
Inventory	-	(43,544)		(13,023)	(30,521)
Prepaid expenses	4,643	4,994	(59,812)	(40,461)	(19,000)
Other assets	-	-	(8,715)	(8,000)	(2,715)
Accounts payable and accrued expenses	104,179	275,116	70,278	207,806	52,582
Net Cash Used In Operating					
Activities	(1,100,342)	(3,312,969)	(980,044)	(2,789,118)	(433,065)
CASH FLOWS FROM INVESTING ACTIVITIES: Cash paid for machinery and					
equipment	(35,500)	(160,172)	(80,275)	(143,433)	(71,187)
Cash paid for intangibles	(11,715)	(43,495)	(31,452)	(36,397)	(28,010)
Net Cash Used In Investing Activities	(47,215)	(203,667)	(111,727)	(179,830)	(99,197)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Borrowings from promissory note	-	-	30,000	-	30,000
Repayment of promissory note	-	-	(30,000)	-	(30,000)
Proceeds from issuance of common stock	2,562,896	3,332,584	4,276,627	5,011,314	35,001
Proceeds from issuance of preferred stock	-	-	-	-	530,000
Proceeds from the exercise of warrants	10,000	10,000	-	-	-
Proceeds received from convertible note			655,000		655,000
Net Cash Provided By Financing Activities	2,572,896	3,342,584	4,931,627	5,011,314	1,220,001
Net Increase (decrease) in Cash	1,425,339	(174,052)	3,839,856	2,042,366	687,739
Cash - Beginning of Period	2,730,105	4,329,496	489,640	687,739	
Cash - End of Period	\$ 4,155,444	\$ 4,155,444	\$ 4,329,496	\$ 2,730,105	\$ 687,739
SUPPLEMENTARY CASH FLOW INFORMATION: Cash Paid During the Period for:					
Income taxes	\$	\$-	\$	\$	\$
Interest	\$	\$ -	\$ 984	\$-	\$ 984
SUPPLEMENTARY					

SUPPLEMENTARY DISCLOSURE OF NON-CASH INVESTING AND FINANCING

\$	72,177	\$	146,016	\$	33,063	\$	101,045	\$	5,857
		-							
\$	165,719	\$	165,719	\$	206,715	\$	206,715	\$	-
\$	-	\$	_	\$	655,000	\$	655,000	\$	-
l <u>\$</u>	16,974	\$	-	\$	-	\$	-	\$	-
1	\$ \$ \$ 1	<u>\$ 165,719</u> <u>\$ -</u>	\$ 165,719 \$ \$ - \$	\$ 165,719 \$ 165,719   \$ - \$ -	\$   165,719   \$   165,719   \$     \$   -   \$   -   \$	\$   165,719   \$   165,719   \$   206,715     \$   -   \$   -   \$   655,000	\$   165,719   \$   165,719   \$   206,715   \$     \$   -   \$   -   \$   655,000   \$	\$   165,719   \$   165,719   \$   206,715   \$   206,715     \$   -   \$   -   \$   655,000   \$   655,000	\$   165,719   \$   165,719   \$   206,715   \$   206,715   \$     \$   -   \$   -   \$   655,000   \$   655,000   \$

See accompanying notes to the consolidated financial statements

# AKOUSTIS TECHNOLOGIES, INC. Notes to the Consolidated Financial Statements June 30, 2016

## Note 1. Organization

Akoustis Technologies, Inc. (formerly known as Danlax, Corp.) ("the Company") was incorporated under the laws of the State of Nevada, U.S. on April 10, 2013. The Company operates in the telecommunications and fiber optics sector and is based in Huntersville, North Carolina. The mission of the Company is to commercialize and manufacture its patent-pending BulkOne<sup>™</sup> acoustic wave technology to address the critical frequency-selectivity requirements in today's mobile smartphones – improving the efficiency and signal quality of mobile wireless devices and enabling The Internet of Things.

# The Merger

On May 22, 2015, Akoustis Acquisition Corp., the Company's wholly owned subsidiary, a corporation formed in the State of Delaware on May 15, 2015 ("Acquisition Sub") merged (the "Merger") with and into Akoustis, Inc., a corporation incorporated in the State of Delaware on May 12, 2014. Akoustis, Inc., was the surviving corporation in the Merger and became a wholly owned subsidiary of the Company. All of the outstanding stock of Akoustis, Inc., was converted into shares of the Company's Common Stock, as described in more detail below.

At the closing of the Merger, each of the 11,671 shares of Common Stock and the 5,300 shares of preferred stock of Akoustis, Inc. issued and outstanding immediately prior to the closing of the Merger was exchanged for 324.082 shares of the Company's Common Stock. As a result, an aggregate of 5,500,006 shares of the Company's Common Stock were issued to the holders of Akoustis Inc. stock.

In connection with the Merger and pursuant to a Split-Off Agreement, the Company transferred all pre-Merger assets and liabilities to the Company's pre-Merger majority stockholder, in exchange for the surrender by him and cancellation of 9,854,019 shares of the Company's Common Stock, resulting in 3,000,005 shares of the Company's Common Stock outstanding at the time of the Merger. These cancelled shares will resume the status of authorized but unissued shares of the Company's Common Stock.

As a result of the Merger and Split-Off, the Company discontinued its pre-Merger business and acquired the business of Akoustis, Inc., and will continue the existing business operations of Akoustis, Inc.

The Merger was accounted for as a "reverse merger," and Akoustis, Inc., was deemed to be the accounting acquirer in the reverse merger. Consequently, the assets and liabilities and the historical operations that will be reflected in the financial statements prior to the Merger will be those of Akoustis, Inc. and will be recorded at the historical cost basis, and the consolidated financial statements after completion of the Merger will include the assets and liabilities of Akoustis, Inc., historical operations of the Company, and operations of the Company and its subsidiaries from the closing date of the Merger. As a result of the issuance of the shares of the Company's Common Stock pursuant to the Merger, a change in control of the Company occurred as of the date of consummation of the Merger. The Merger is intended to be treated as a tax-free exchange under Section 368(a) of the Internal Revenue Code of 1986, as amended. All historical share amounts of the accounting acquirer were retrospectively recast to reflect the share exchange.

Also on May 22, 2015, the Company changed its fiscal year from a fiscal year ending on July 31 of each year to one ending on March 31 of each year. On August 11, 2016, the Board of Directors adopted a resolution to change the fiscal year end from March 31 to June 30.

Since inception through June 30, 2016, the Company has not generated any revenue from operations and has accumulated losses of \$6,674,813.

# The Financing

On May 22, 2015, concurrently with the closing of the Merger, and as a condition to the Merger, the Company held a closing on a private placement offering (the "2015 Offering") in which the Company sold 3,101,104 shares of its Common Stock, at a purchase price of \$1.50 per share. On June 10, 2015, the Company completed a second and final closing of the private placement offering in which the Company sold an additional 261,000 shares of Common Stock. In total, the Company sold an aggregate of 3,362,104 shares of Common Stock. The aggregate gross proceeds from the 2015 Offering was \$5,043,206 (before deducting placement agent fees and offering expenses of \$801,579).

As a result of the foregoing, the Placement Agents and their sub-agents were paid aggregate commissions of \$486,976 and were issued 2015 Placement Agent Warrants to purchase an aggregate of 324,650 shares of our Common Stock. We were also required to reimburse the Placement Agents approximately \$77,150 of legal expenses incurred in connection with the 2015 Offering.

During April and May 2015, \$655,000 principal amount of convertible notes of Akoustis, Inc., were converted into 436,806 shares of Common Stock of the Company on the same terms as the other investors in the 2015 Offering at a conversion price of \$1.50 per share.

On August 6, 2015, the Company filed with the Securities and Exchange Commission (the "SEC") a registration statement on Form S-1 for the public offering by selling stockholders of up to 7,876,310 shares of its Common Stock (which includes outstanding shares of Common Stock, shares underlying warrants and shares that may become issuable pursuant to an anti-dilution provision applicable to certain of the outstanding shares) pursuant to registration rights granted in connection with the 2015 Offering. The SEC declared the Form S-1 effective on October 20, 2015.



# The 2016 Offering

On March 10, 2016, the Company held a closing of a private placement offering (the "March 2016 Offering") in which it sold 494,125 shares of Common Stock at a fixed purchase price of \$1.60 per share (the "2016 Offering Price"), for aggregate gross proceeds of \$790,600 (before deducting legal expenses of \$20,913 for the March 2016 Offering).

On April 14, 2016, the Company held closings of a private placement offering (the "April 2016 Offering") in which the Company sold 1,741,185 shares of Common Stock at a fixed purchase price of \$1.60 per share (the "2016 Offering Price"), for aggregate gross proceeds of \$2,785,896 (before deducting expenses of \$223,000 for legal services and agent commissions of the April 2016 Offering).

Investors in the shares were given anti-dilution protection with respect to the shares of Common Stock sold in the April 2016 Offering such that if, during the period from the closing of the April 2016 Offering until 90 days after the date on which the registration statement that the Company is required to file under a Registration Rights Agreement with the investors is declared effective by the SEC, the Company shall issue additional shares of Common Stock or Common Stock equivalents (subject to customary exceptions, including but not limited to issuances of awards under the Company's 2015 Equity Incentive Plan and certain issuances of securities in connection with credit arrangements, equipment financings, lease arrangements or similar transactions) for a consideration per share less than the 2016 Offering Price (as adjusted for any subsequent stock dividend, stock split, distribution, recapitalization, reclassification, reorganization or similar event) (the "Lower Price"), each such investor will be entitled to receive from the Company additional shares of Common Stock in an amount such that, when added to the number of shares of Common Stock initially purchased by such investor, will equal the number of shares of Common Stock that such investor's Offering subscription amount would have purchased at the Lower Price. As of mid-October 2016, the anti-dilution rights expired.

In connection with the April 2016 Offering, the Company agreed to pay the Placement Agents a cash commission of 8% of the gross proceeds raised from investors first contacted by the Placement Agents in the 2016 Offering. In addition, the Placement Agents received warrants to purchase a number of shares of Common Stock equal to 10% of the number of shares of Common Stock sold in the April 2016 Offering, with a term of five (5) years and an exercise price of \$1.60 per share (the "2016 Placement Agent Warrants"). Any sub-agent of the Placement Agents that introduced investors to the 2016 April Offering was entitled to share in the cash fees and warrants attributable to those investors as described above.

As a result of the foregoing, the Placement Agents and their sub-agents were paid an aggregate commission of \$196,752 and were issued 2016 Placement Agent Warrants to purchase an aggregate of 153,713 shares of Common Stock. The Company was also required to reimburse the Placement Agents approximately \$17,500 of legal expenses incurred in connection with the 2016 Offering, of which \$7,500 was paid by the issuance of 4,690 shares of Common Stock (valued at the 2016 Offering Price).

## Note 2. Going Concern and Management Plans

The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As of June 30, 2016, the Company had working capital of \$3,710,160 and an accumulated deficit of \$6,674,813. The Company has not generated any revenues from operations and incurred net losses since inception. As of June 30, 2016, the Company had cash and cash equivalents of \$4,155,444. The Company estimates that the \$2.8 million of cash and cash equivalents as of October 25, 2016, and the future receipts from National Science Foundation/Small Business Innovation Research ("NSF/SBIR") grants already awarded will be sufficient to fund its operations through March 31, 2017. In order to fund operations past that date, the Company will need to raise additional capital, through the sale of additional equity securities, through additional grants, or otherwise, to support future operations. There is no assurance that the Company's projections and estimates are accurate. Although the Company is actively managing and controlling the Company's cash outflows to mitigate these risks, these matters raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of asset amounts or the classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

The Company's primary sources of operating funds since inception have been equity and note financings and grants. The Company intends to raise additional capital through private debt and equity investors in order to accomplish its business plan objectives and is continuing its efforts to secure additional funds through debt or equity instruments and grants. Management believes that it will be successful in obtaining additional financing based on its history of raising funds; however, no assurance can be provided that the Company will be able to do so. There is no assurance that any funds it raises will be sufficient to enable the Company to attain profitable operations or continue as a going concern. To the extent that the Company is unsuccessful, the Company may need to curtail or cease its operations and implement a plan to extend payables or reduce overhead until sufficient additional capital is raised to support further operations. There can be no assurance that such a plan will be successful.

# Note 3. Summary of significant accounting policies

# **Basis of presentation**

The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("US GAAP") and the rules and regulations of the Securities and Exchange Commission ("SEC").

# **Principles of Consolidation**

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Akoustis, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation.



## Use of estimates and assumptions

The preparation of financial statements in conformity with US GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date(s) of the financial statements and the reported amounts of revenues and expenses during the reporting period(s).

Critical accounting estimates are estimates for which (a) the nature of the estimate is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change and (b) the impact of the estimate on financial condition or operating performance is material. The Company's critical accounting estimates and assumptions affecting the financial statements were:

- (1) Fair value of long-lived assets: Fair value is generally determined using the asset's expected future discounted cash flows or market value, if readily determinable. If long-lived assets are determined to be recoverable, but the newly determined remaining estimated useful lives are shorter than originally estimated, the net book values of the long-lived assets are depreciated over the newly determined remaining estimated useful lives. The Company considers the following to be some examples of important indicators that may trigger an impairment review: (i) significant under-performance or losses of assets relative to expected historical or projected future operating results; (ii) significant changes in the manner or use of assets or in the Company's overall strategy with respect to the manner or use of the acquired assets or changes in the Company's overall business strategy; (iii) significant negative industry or economic trends; (iv) increased competitive pressures; (v) a significant decline in the Company's stock price for a sustained period of time; and (vi) regulatory changes. The Company evaluates acquired assets for potential impairment indicators at least annually and more frequently upon the occurrence of such events.
- (2) Valuation allowance for deferred tax assets: Management assumes that the realization of the Company's net deferred tax assets resulting from its net operating loss ("NOL") carry–forwards for Federal income tax purposes that may be offset against future taxable income was not considered more likely than not and accordingly, the potential tax benefits of the net loss carry–forwards are offset by a full valuation allowance. Management made this assumption based on (a) the Company has incurred a loss, (b) general economic conditions, and (c) other factors.
- (3) *Estimates and assumptions used in valuation of equity instruments:* Management estimates expected term of share options and similar instruments, expected volatility of the Company's common shares and the method used to estimate it, expected annual rate of quarterly dividends, and risk free rate(s) to value share options and similar instruments.
- (4) *Estimates and assumptions used in valuation of derivative liability:* Management utilizes a binomial option pricing model to estimate the fair value of derivative liabilities. The model includes subjective assumptions that can materially affect the fair value estimates.



These significant accounting estimates or assumptions bear the risk of change due to the fact that there are uncertainties attached to these estimates or assumptions, and certain estimates or assumptions are difficult to measure or value.

Management bases its estimates on various assumptions that are believed to be reasonable in relation to the financial statements taken as a whole under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

## Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. As of June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015, the Company had cash and cash equivalents of \$4,155,444, \$4,329,496, \$2,730,105 and \$687,739, respectively. Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash deposits. The Company maintains its cash in institutions insured by the Federal Deposit Insurance Corporation ("FDIC"). At times, the Company's cash and cash equivalent balances may be uninsured or in amounts that exceed the FDIC insurance limits.

#### **Inventory**

Inventory is stated at lower of cost or market using the first-in, first-out (FIFO) valuation method. Inventory was comprised of the following at June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015:

	June 30, 2016			June 30, 2016		June 30, 2016			June 30, 2015		June 30, 2015		June 30, 2015		June 30, 2015		June 30, 2015		Ma	rch 31, 2016	M	arch 31, 2015
Finished goods held for resale	\$	43,544	\$		-	\$	43,544	\$	-													
Raw materials		-			-		-		30,521													
	\$	43,544	\$		-	\$	43,544	\$	30,521													

## Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation. Depreciation is calculated using the straight-line method on the various asset classes over their estimated useful lives, which range from three to ten years. Expenditures for major renewals and betterments that extend the useful lives of property and equipment are capitalized. Expenditures for maintenance and repairs, which do not extend the economic useful life of the related assets, are charged to operations as incurred.

# Intangible assets, net

Intangible assets consist of patents and trademarks. Applicable long-lived assets are amortized or depreciated over the shorter of their estimated useful lives, the estimated period that the assets will generate revenue, or the statutory or contractual term in the case of patents. Estimates of useful lives and periods of expected revenue generation are reviewed periodically for appropriateness and are based upon management's judgment. Patents are amortized on the straight-line method over their useful lives of 15 years.

# **Impairment of Long-Lived Assets**

The Company assesses the recoverability of its long-lived assets, including property and equipment, when there are indications that the assets might be impaired. When evaluating assets for potential impairment, the Company compares the carrying value of the asset to its estimated undiscounted future cash flows. If an asset's carrying value exceeds such estimated undiscounted cash flows, the Company records an impairment charge for the difference between the carrying amount of the asset and its fair value.

Based on its assessments, the Company did not record any impairment charges for the three months ended June 30, 2016, the years ended June 30, 2016, June 30, 2015 and March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015.

# Fair Value of Financial Instruments

The carrying amounts of cash and cash equivalents, accounts payable, accrued expenses, and convertible notes payable approximate fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities based on the guidance of ASC 820, "Fair Value Measurements and Disclosures," which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements.

ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

Fair value measurements are categorized using a valuation hierarchy for disclosure of the inputs used to measure fair value, which prioritize the inputs into three broad levels:

Level 1 - Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 - Pricing inputs are other than quoted prices in active markets included in level 1, which are either directly or indirectly observable as of the reported date, and include those financial instruments that are valued using models or other valuation methodologies.

Level 3 - Pricing inputs include significant inputs that are generally less observable from objective sources. These inputs may be used with internally developed methodologies that result in management's best estimate of fair value.

# **Derivative Liability**

The Company evaluates its convertible debt, options, warrants or other contracts, if any, to determine if those contracts or embedded components of those contracts qualify as derivatives to be separately accounted for in accordance with paragraph 815-10-05-4 and Section 815-40-25 of the FASB Accounting Standards Codification. The result of this accounting treatment is that the fair value of the embedded derivative is marked-to-market each balance sheet date and recorded as either an asset or a liability. The change in fair value is recorded in the consolidated statement of operations as other income or expense. Upon conversion, exercise or cancellation of a derivative instrument, the instrument is marked to fair value at the date of conversion, exercise or cancellation and then the related fair value is reclassified to equity.

In circumstances where the embedded conversion option in a convertible instrument is required to be bifurcated and there are also other embedded derivative instruments in the convertible instrument that are required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Equity instruments that are initially classified as equity that become subject to reclassification are reclassified to liability at the fair value of the instrument on the reclassification date. Derivative instrument liabilities will be classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument is expected within 12 months of the balance sheet date.

The Company adopted Section 815-40-15 of the FASB Accounting Standards Codification ("Section 815-40-15") to determine whether an instrument (or an embedded feature) is indexed to the Company's own stock. Section 815-40-15 provides that an entity should use a two-step approach to evaluate whether an equity-linked financial instrument (or embedded feature) is indexed to its own stock, including evaluating the instrument's contingent exercise and settlement provisions.

The Company utilizes a binomial option pricing model to compute the fair value of the derivative and to mark to market the fair value of the derivative at each balance sheet date. The Company records the change in the fair value of the derivative as other income or expense in the consolidated statements of operations.

# Grant income

During the three months ended June 30, 2016, the Company received grant funds of \$20,500. During the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015, the Company received grant funds of \$254,834, \$167,499, \$264,333 and \$137,500, respectively. The Company recognizes nonrefundable grant revenue when it is received and reports this revenue as "Grant income" on the consolidated statements of operations.



# **Research and Development**

Research and development expenses are charged to operations as incurred.

# Advertising and marketing costs

The Company expenses advertising and marketing costs as incurred. These amounts were immaterial for the three months June 30, 2016, the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015.

# Equity-based compensation

The Company recognizes compensation expense for all equity-based payments in accordance with ASC 718 "Compensation – Stock Compensation". Under fair value recognition provisions, the Company recognizes equity-based compensation net of an estimated forfeiture rate and recognizes compensation cost only for those shares expected to vest over the requisite service period of the award.

Restricted stock awards are granted at the discretion of the Company. These awards are restricted as to the transfer of ownership and generally vest over the requisite service periods, typically over a five-year period (vesting on a straight–line basis). The fair value of a stock award is equal to the fair market value of a share of Company stock on the grant date.

The fair value of an option award is estimated on the date of grant using the Black–Scholes option valuation model. The Black–Scholes option valuation model requires the development of assumptions that are inputs into the model. These assumptions are the value of the underlying share, the expected stock volatility, the risk–free interest rate, the expected life of the option, the dividend yield on the underlying stock and the expected forfeiture rate. Expected volatility is benchmarked against similar companies in a similar industry over the expected option life and other appropriate factors. Risk–free interest rates are calculated based on continuously compounded risk–free rates for the appropriate term. The dividend yield is assumed to be zero as the Company has never paid or declared any cash dividends on its Common stock and does not intend to pay dividends on its Common stock in the foreseeable future. The expected forfeiture rate is estimated based on management's best estimate.

Determining the appropriate fair value model and calculating the fair value of equity-based payment awards requires the input of the subjective assumptions described above. The assumptions used in calculating the fair value of equity-based payment awards represent management's best estimates, which involve inherent uncertainties and the application of management's judgment. As a result, if factors change and the Company uses different assumptions, our equity-based compensation could be materially different in the future. In addition, the Company is required to estimate the expected forfeiture rate and recognize expense only for those shares expected to vest. If the Company's actual forfeiture rate is materially different from its estimate, the equity-based compensation could be significantly different from what the Company has recorded in the current period.



The Company accounts for share-based payments granted to non-employees in accordance with ASC 505-40, "*Equity Based Payments to Non-Employees*". The Company determines the fair value of the stock-based payment as either the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measurable. If the fair value of the equity instruments issued is used, it is measured using the stock price and other measurement assumptions as of the earlier of either (1) the date at which a commitment for performance by the counterparty to earn the equity instruments is reached, or (2) the date at which the counterparty's performance is complete. The fair value of the equity instruments is re-measured each reporting period over the requisite service period.

#### Income taxes

The Company applies the elements of ASC 740–10 "*Income Taxes*" regarding accounting for uncertainty in income taxes. This clarifies the accounting for uncertainty in income taxes recognized in financial statements and requires the impact of a tax position to be recognized in the financial statements if that position is more likely than not of being sustained by the taxing authority. As of March 31, 2016, no liability for unrecognized tax benefits was required to be reported. The Company does not expect that the amount of unrecognized tax benefits will significantly increase or decrease within the next twelve months. The Company's policy is to recognize interest and penalties related to tax matters in the income tax provision on the Statement of Operations. There was no interest and penalties for the periods ended June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015.

Deferred taxes are computed based on the tax liability or benefit in future years of the reversal of temporary differences in the recognition of income or deduction of expenses between financial and tax reporting purposes. The net difference, if any, between the provision for taxes and taxes currently payable is reflected in the balance sheet as deferred taxes. Deferred tax assets and/or liabilities, if any, are classified as current and non-current based on the classification of the related asset or liability for financial reporting purposes, or based on the expected reversal date for deferred taxes that are not related to an asset or liability. Valuation allowances are recorded to reduce deferred tax assets to that amount which is more likely than not to be realized.

# Loss Per Share

Basic net loss per common share is computed by dividing net loss attributable to Common Stockholders by the weighted-average number of common shares outstanding during the period. Diluted net loss per common share is determined using the weighted-average number of common shares outstanding during the period, adjusted for the dilutive effect of Common Stock equivalents. In periods when losses are reported, which is the case for the three months ended June 30, 2016, the years ended June 30, 2016, June 30, 2015 and March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015 presented in these consolidated financial statements, the weighted-average number of common shares outstanding excludes Common Stock equivalents because their inclusion would be anti-dilutive.

The Company had the following Common Stock equivalents at June 30, 2016, June 30, 2015, March 31, 2016 and 2015:

	June 30, 2016	June 30, 2015	March 31, 2016	March 31, 2015
Options	160,000	160,000	160,000	
Warrants	471,697	324,650	324,650	
Totals	631,697	484,650	484,650	

## Shares outstanding

Shares outstanding include shares of restricted stock with respect to which restrictions have not lapsed. Restricted stock included in reportable shares outstanding was 1,361,055, 546,886, 1,353,055 shares and 623,855 shares as of June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015, respectively. Shares of restricted stock are included in the calculation of weighted average shares outstanding.

#### Reclassification

Certain prior period amounts have been reclassified to conform to current period presentation. The reclassifications did not have an impact on net loss as previously reported.

# **Recent Accounting Pronouncements**

In August 2014, the Financial Accounting Standards Board issued Accounting Standards Update 2014-15, "*Presentation of Financial Statements-Going Concern*". The Update provides U.S. GAAP guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and about related footnote disclosures. For each reporting period, management will be required to evaluate whether there are conditions or events that raise substantial doubt about a company's ability to continue as a going concern within one year from the date the financial statements are issued. This Accounting Standards Update is the final version of Proposed Accounting Standards Update 2013-300—Presentation of Financial Statements (Topic 205): Disclosure of Uncertainties about an Entity's Going Concern Presumption, which has been deleted. The amendments in this Update are effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. The Company is currently evaluating the effects of ASU 2014-15 on the consolidated financial statements.

In July 2015, the FASB issued the FASB Accounting Standards Update No. 2015-11 "*Inventory (Topic 330): Simplifying the Measurement of Inventory*" ("ASU 2015-11"). The amendments in this Update do not apply to inventory that is measured using last-in, first-out (LIFO) or the retail inventory method. The amendments apply to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. An entity should measure inventory within the scope of this Update at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Subsequent measurement is unchanged for inventory measured using LIFO or the retail inventory method. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. The Company is currently evaluating the effects of ASU 2015-11 on the consolidated financial statements.



In November 2015, the FASB issued Accounting Standards Update ASU No. 2015-17, "*Balance Sheet Classification of Deferred Taxes*", which will require entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. The ASU simplifies the current guidance, which requires entities to separately present deferred tax assets and deferred tax liabilities as current and noncurrent in a classified balance sheet. The ASU may be applied either prospectively or retrospectively. The amendments in this ASU are effective for annual reporting periods beginning after December 15, 2016 and interim periods within those annual periods. Earlier application is permitted as of the beginning of an interim or annual period. The Company is currently evaluating the effects of ASU 2015-17 on the consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, "Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities". The update addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted only for certain portions of the ASU related to financial liabilities. The Company is currently evaluating the impact of the provisions of this new standard on the consolidated financial statements.

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, "*Leases*" (topic 842). The FASB issued this update to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The updated guidance is effective for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company is currently evaluating the impact of the new standard.

In April 2016, the FASB issued ASU No. 2016-09, "*Compensation – Stock Compensation*" (topic 718). The FASB issued this update to improve the accounting for employee share-based payments and affect all organizations that issue share-based payment awards to their employees. Several aspects of the accounting for share-based payment award transactions are simplified, including: (a) income tax consequences; (b) classification of awards as either equity or liabilities; and (c) classification on the statement of cash flows. The updated guidance is effective for annual periods beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company is currently evaluating the impact of the new standard.

In August 2016, the FASB issued Accounting Standards Update 2016-15 (ASU 2016-15), "*Classification of Certain Cash Receipts and Cash Payments*". This update provides guidance on how to record eight specific cash flow issues. This update is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted and a retrospective transition method to each period should be presented. The Company is currently evaluating the effect of this update on its consolidated financial statements.

# Subsequent events

The Company has evaluated events that occurred subsequent to June 30, 2016 and through the date the consolidated financial statements were issued.

### Note 4. Property and equipment

Property and equipment consisted of the following:

	Estimated Useful Life	June 30, 2016		June 30, 2015		March 31, 2016		Ι	March 31, 2015
Research and development equipment	3 – 10 years	\$	226,372	\$	70,091	\$	192,672	\$	66,095
Computer equipment	5 years		16,783		12,892		14,983		4,367
Furniture and fixtures	5-10 years		3,725		3,725		3,725		725
Leasehold improvements	*		3,240		3,240		3,240		_
			250,120		89,948		214,620		71,187
Less: Accumulated depreciation			(43,135)		(8,307)		(31,710)		(5,675)
Total		\$	206,985	\$	81,641	\$	182,910	\$	65,512

(\*) Amortized on a straight-line basis over the term of the lease or the estimated useful lives, whichever period is shorter.

The Company recorded depreciation expense of \$11,425 for three months ended June 30, 2016. The Company recorded depreciation expense of \$34,828, \$8,090, \$26,035 and \$5,675 for the years ended June 30, 2016, June 30, 2015 and March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015, respectively.

## Note 5. Intangible assets

The Company's intangible assets consisted of the following:

	Estimated useful life	Jun	ne 30, 2016	June 30, 2015	I	March 31, 2016	I	March 31, 2015
Patents	15 years	\$	74,562	\$ 31,067	\$	62,847	\$	26,450
Less: Accumulated amortization			(4,889)	(1,550)		(3,758)		(1,044)
Subtotal			69,673	29,517		59,089		25,406
Trademarks	—		1,560	1,560		1,560		1,560
Intangible assets, net		\$	71,233	\$ 31,077	\$	60,649	\$	26,966

The Company recorded amortization expense of \$1,131 for three months ended June 30, 2016. The Company recorded amortization expense of \$3,339, \$1,550, \$2,714 and \$1,044, for the years ended June 30, 2016, June 30, 2015 and March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015, respectively.

The following table outlines estimated future annual amortization expense for the next five years and thereafter:

June 30,		
2017	\$	4,921
2018		4,921
2019		4,921
2020		4,921
2021		4,921
Thereafter		45,068
	5	69,673

# Note 6. Accounts payable and accrued expenses

Accounts payable and accrued expenses consisted of the following at June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015:

	e	June 30, 2016	June 30, 2015	I	March 31, 2016	Ν	March 31, 2015
Accounts payable	\$	73,400	\$ 20,454	\$	49,011	\$	157
Accrued salaries and benefits		21,376	44,365		43,323		-
Accrued bonuses		126,575	-		93,141		-
Accrued stock-based compensation		179,079	33,063		106,902		5,857
Other accrued expenses		143,216	24,632		74,913		52,425
Totals	\$	543,646	\$ 122,514	\$	367,290	\$	58,439

# Note 7. Convertible notes payable

During March 2015, Akoustis, Inc. received \$655,000 in proceeds from six investors upon execution of convertible notes. On April 9, 2015, one note holder converted \$10,000 of his outstanding convertible note to 6,806 shares of Common Stock of the Company. On May 22, 2015, the remaining \$645,000 of the notes were converted to 430,000 shares of Common Stock of the Company.

# Note 8. Derivative Liabilities

Upon closing of the private placement transactions on May 22, 2015 and June 9, 2015, the Company issued 298,551 and 26,099 warrants, respectively, to purchase Common Stock with an exercise price of \$1.50 and a five-year term to the placement agent. Upon closing of the April 2016 Offering, the Company issued 153,713 warrants to purchase Common Stock with an exercise price of \$1.60 and a five-year term to the placement agent shares of Common Stock. The Company identified certain put features embedded in the warrants that potentially could result in a net cash settlement, requiring the Company to classify the warrants as a derivative liability.

# Level 3 Financial Liabilities – Derivative warrant liabilities

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the consolidated balance sheet as of June 30, 2016:

	(	Carrying	rrying Fair Value Measurement Using									
		Value		Level 1		Level 2		Level 3		Total		
Derivative warrant liabilities	\$	1,322,729	\$		\$		- \$	1,322,729	\$	1,322,729		

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the consolidated balance sheet as of June 30, 2015:

	(	Carrying			nent Using	g				
		Value		Level 1		Level 2		Level 3	Total	
Derivative warrant liabilities	\$	205,144	\$		\$		\$	205,144	\$	205,144

Financial assets and liabilities measured at fair value on a recurring basis are summarized below and disclosed on the consolidated balance sheet as of March 31, 2016:

	0	Carrying	arrying Fair Value Measurement Using											
		Value		Level 1		Level 2		Level 3		Total				
Derivative warrant liabilities	\$	313,709	\$		\$		\$	313,709	\$	313,709				

The table below provides a summary of the changes in fair value, including net transfers in and/or out, of all financial assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the period April 1, 2015 ended June 30, 2016:

	Me	Cair Value easurement ing Level 3 Inputs Total
Balance, April 1, 2015	\$	
Issuance of derivative warrant liabilities		206,715
Change in fair value of derivative warrants		(1,571)
Balance, June 30, 2015		205,144
Change in fair value of derivative warrants		108,565
Balance, March 31, 2016		313,709
Issuance of derivative warrants		165,719
Transfer from liability to equity classification due to exercise		(16,974)
Change in fair value of derivative warrant liabilities		860,275
Balance, June 30, 2016	\$	1,322,729



The fair value of the derivative feature of the warrants on the issuance dates and at the balance sheet date were calculated using a binomial option model valued with the following weighted average assumptions:

	May 22, 2015	June 9, 2015	June 30, 2015	March 31, 2016	April 14, 2016	June 30, 2016
Risk free interest rate	1.57%	1.74%	1.63%	1.04%	1.08%	1.01%
Dividend yield	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Expected volatility	47%	47%	47%	41%	44%	39%
Remaining term (years)	5.0	5.0	4.89 - 4.94	4.15 - 4.19	5.0	3.89 - 4.79

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Note with a similar term on the date of the grant.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

Volatility: The Company calculates the expected volatility of the stock price based on the corresponding volatility of the Company's peer group stock price for a period consistent with the warrants' expected term.

Remaining term: The Company's remaining term is based on the remaining contractual maturity of the warrants.

During the three months ended June 30, 2016, the Company marked the derivative feature of the warrants to fair value and recorded a loss of \$860,275, relating to the change in fair value.

During the years ended June 30, 2016, June 30, 2015 and March 31, 2016, the Company marked the derivative feature of the warrants to fair value and recorded a gain (loss) of \$(968,840), \$1,571 and \$(106,994), respectively, relating to the change in fair value.

# Note 9. Concentrations

For the three months ended June 30, 2016, four vendors represented 32%, 16%, 15% and 13% of the Company's purchases.

For the year ended June 30, 2016, two vendors represented 28% and 14% of the Company's purchases. For the year ended June 30, 2015, two vendors represented 31% and 19% of the Company's purchases. For the year ended March 31, 2016, one vendor represented 10% of the Company's purchases. For the period May 12, 2014 (Inception) through March 31, 2015, three vendors represented 46%, 17% and 10% of the Company's purchases.

# Note 10. Stockholders' Equity

On April 15, 2015, the Company authorized the execution and filing of Amended and Restated Articles of Incorporation with the Nevada Secretary of State, which among other things, authorized the increase in the number of authorized shares of capital stock from 75,000,000 shares of Common Stock to 310,000,000 total shares consisting of (a) 300,000,000 shares of par value \$0.001 Common Stock and (b) 10,000,000 of \$0.001 par value "blank check" preferred stock. As of June 30, 2016, June 30, 2015, March 31, 2016 and March 31, 2015, there were no shares of preferred stock issued and outstanding.

As a result of the Merger, an aggregate of 5,500,006 shares of the Company's Common Stock were issued to the holders of Akoustis Inc. stock.

In connection with the Split-Off Agreement, the Company transferred all pre-Merger assets and liabilities to the Company's pre-Merger majority stockholder, in exchange for the surrender by him and cancellation of 9,854,019 shares of the Company's Common Stock. These cancelled shares resumed the status of authorized but unissued shares of the Company's Common Stock. The remaining shareholders of the Company owned 3,000,005 shares of Common Stock shown as a recapitalization on the Consolidated Statement of Stockholders' Equity.

On May 22, 2015, the Company issued 100,000 shares of Common Stock for professional services provided. These shares were expensed in the Consolidated Statement of Operations for the grant date fair value of \$150,000.

During December 2015, 230,000 restricted shares were granted to two consultants pursuant to a one-year investor relations agreement with a fair value of \$963,700 at June 30, 2016. The restricted shares will vest over the life of the consulting agreement. As of June 30, 2016, the Company had \$757,492 in unrecognized stock-based compensation expense related to the unvested shares.

In March 2016, the above consulting agreements originally executed in December 2015 were amended so that the consultants would receive shares of Common Stock over the remaining term of the agreement in lieu of the monthly cash retainer. Pursuant to the amended agreement, the Company granted 60,000 restricted shares to the two consultants with a fair value of \$251,400 at June 30, 2016. The restricted shares will vest over the remaining life of the consulting agreement. As of June 30, 2016, the Company had \$179,614, in unrecognized stock based compensation expense related to the unvested shares.

In relation to the above consulting agreements for the three months ended June 30, 2016, the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period May 12, 2014 (Inception) through June 30, 2015 the Company recorded stock–based compensation expense for the shares that have vested, which is a component of general and administrative expenses in the Consolidated Statement of Operations as follows:

			S	tocl	k Based Con	npei	isatio	n		
	Shares	For the Three Months Ended June 30,	For the Year Ended June 30,		For the Year Ended June 30,	uper	]	For the Year Ended [arch 31,	For the Period from May 12, 2014 (Inception) through March 31,	
	Issued	2016	2016		2015			2016	2015	
December 2015	230,000	\$ 206,208	\$ 342,811	\$		-	\$	136,603	\$	-
March 2016	60,000	59,653	71,786			-		12,133		-
	290,000	\$ 265,861	\$ 414,597	\$		-	\$	148,736	\$	-

As further discussed in Note 1, the Company issued 3,362,104 shares of Common Stock in connection with the private placement in May and June 2015.

As discussed in Note 1, on March 10, 2016, the Company held a closing of a private placement offering (the "March 2016 Offering") in which it sold 494,125 shares of Common Stock at a fixed purchase price of \$1.60 per share (the "2016 Offering Price"), for aggregate gross proceeds of \$790,600 (before deducting legal expenses of the March 2016 Offering).

As discussed in Note 1, on April 14, 2016, the Company held closings of a private placement offering (the "April 2016 Offering") in which the Company sold 1,741,185 shares of Common Stock at a fixed purchase price of \$1.60 per share (the "2016 Offering Price"), for aggregate gross proceeds of \$2,785,896 (before deducting expenses for legal services and agent commissions of the April 2016 Offering).

As of June 30, 2016, June 30, 2015, March 31, 2016 and 2015, the Company had 15,375,981, 12,469,084, 13,615,440 and 5,493,200 common shares issued and outstanding, respectively.

# Stock incentive plan

# 2014 Stock Plan

On June 14, 2014, the Board of Directors of Akoustis Inc. adopted, and on the same date its stockholders approved, the 2014 Stock Plan which reserved a total of 1,950 shares of Common Stock of Akoustis, Inc. for issuance. The 2014 Stock Plan authorized the grant to participants of incentive stock options, nonstatutory stock options, and restricted stock awards. Shares issued under the 2014 Plan and later forfeited to the Company due to the failure to vest or repurchased by the Company at the original purchase price paid to the Company for such shares, were available for future awards.

Vesting of all shares under the 2014 Stock Plan was determined by the plan administrator on a grant-by-grant basis. The typical vesting schedule provided that 25% of the shares subject to the award would vest on the first year anniversary of the date of grant, and 1/48<sup>th</sup> of the total number of shares awarded would vest on a monthly basis thereafter.

From June 14, 2014 to May 22, 2015, the date of the Merger, Akoustis Inc. issued restricted stock awards representing an aggregate of 1,925 shares of common stock of Akoustis Inc. to employees and contractors under the 2014 Stock Plan. On May 22, 2015, each of the 1,925 shares of common stock issued under the 2014 Stock Plan was exchanged for 324.082 shares of the Company's Common Stock with the same vesting schedule applicable to the exchanged shares. Although as of May 22, 2015 there were 8,102 shares available for issuance under the 2014 Stock Plan (each of the 25 common shares remaining converted into 324.082 remaining shares of the Company), the Company no longer intends to grant awards under the 2014 Stock Plan.

# 2015 Equity Compensation Plan

On May 22, 2015, the Board of Directors adopted, and on the same date the stockholders approved, the 2015 Plan, which reserves a total of 1,200,000 shares of Common Stock for issuance under the 2015 Plan. The 2015 Plan authorizes the grant to participants of nonqualified stock options, incentive stock options, restricted stock awards, restricted stock units, performance grants. The Company agreed not to grant awards under the 2015 Plan for more than 600,000 shares of Common Stock during the first year following the closing of the Merger. If an incentive award granted under the 2015 Plan expires, terminates, is unexercised or is forfeited, or if any shares are surrendered to the Company in connection with an incentive award, the shares subject to such award and the surrendered shares will become available for further awards under the 2015 Plan.

In addition, the number of shares of our Common Stock subject to the 2015 Plan, any number of shares subject to any numerical limit in the 2015 Plan, and the number of shares and terms of any incentive award are expected to be adjusted in the event of any change in our outstanding Common Stock by reason of any stock dividend, spin-off, split-up, stock split, reverse stock split, recapitalization, reclassification, merger, consolidation, liquidation, business combination or exchange of shares or similar transaction.

Options granted under the Plan vest as determined by the Company's board of directors and expire over varying terms, but not more than seven years from the date of grant. In the case of an Incentive Stock Option that is granted to a 10% shareholder on the date of grant, such Option shall not be exercisable after the expiration of five years from the date of grant. The 160,000 options were issued to four non-employee directors in May 2015.

The fair values of the Company's options were estimated at the dates of grant using a Black-Scholes option pricing model with the following weighted average assumptions:

Expected term (years)	6.25
Risk-free interest rate	1.29%
Volatility	47%
Dividend yield	0%

Expected term: The Company's expected term is based on the period the options are expected to remain outstanding. The Company estimated this amount utilizing the "Simplified Method" in that the Company does not have sufficient historical experience to provide a reasonable basis to estimate an expected term.

Risk-free interest rate: The Company uses the risk-free interest rate of a U.S. Treasury Note with a similar term on the date of the grant.

Volatility: The Company calculates the expected volatility of the stock price based on the corresponding volatility of the Company's peer group stock price for a period consistent with the options' expected term.

Dividend yield: The Company uses a 0% expected dividend yield as the Company has not paid dividends to date and does not anticipate declaring dividends in the near future.

The following is a summary of the option activity:

	Options	Weighted Average Exercise Price
Outstanding – April 1, 2015		\$ —
Exercisable – April 1, 2015	—	
Granted	160,000	1.50
Exercised	—	
Forfeited/Cancelled		
Outstanding – June 30, 2015	160,000	\$ 1.50
Exercisable – June 30, 2015		\$ —
Granted		
Exercised	—	
Forfeited/Cancelled		
Outstanding – March 31, 2016	160,000	\$ 1.50
Exercisable – March 31, 2016		\$
Granted		
Exercised	—	
Forfeited/Cancelled	—	
Outstanding – June 30, 2016	160,000	\$ 1.50
Exercisable – June 30, 2016 (1)	40,000	\$ 1.50

As of June 30, 2016, the total intrinsic value of options outstanding and exercisable was \$430,400 and \$107,600, respectively. As of June 30, 2016, the Company has \$80,732 in unrecognized stock based compensation expense attributable to the outstanding options which will be amortized over a period of 2.89 years.

For the three months ended June 30, 2016, the Company recorded \$6,964 in stock-based compensation related to stock options which is reflected in the consolidated statements of operations.

For the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015, the Company recorded \$28,008, \$2,984, \$24,028 and \$0, respectively, in stock-based compensation related to stock options which is reflected in the consolidated statements of operations.

#### Issuance of restricted shares - employees and consultants

Restricted stock awards are considered outstanding at the time of execution by the Company and the recipient of a restricted stock agreement, as the stock award holders are entitled to dividend and voting rights. As of June 30, 2016, the number of shares granted for which the restrictions have not lapsed was 463,841 shares.

Restricted shares are valued using the share price on the date of most recent equity raise or the value of the services performed, whichever is more readily determinable. The grant date fair value of the award is recorded as share–based compensation expense over the respective restriction period. Any portion of the grant awarded to consultants as to which the repurchase option has not lapsed is accrued on the Balance Sheet as a component of accounts payable and accrued expenses. As of June 30, 2016, June 30, 2015, March 31, 2016 and 2015, the accrued stock-based compensation was \$179,079, \$33,063, \$106,902 and \$5,857, respectively. The Company has the right to repurchase some or all of such shares upon termination of the individual's service with the Company, whether voluntary or involuntary, for 60 months from the date of termination ("repurchase option"). The shares as to which the repurchase option has not lapsed are subject to forfeiture upon termination of consulting and employment agreements.

In September 2015, the Company amended the original restricted stock agreement for certain award recipients. According to the amendment, 75% of the shares as to which the repurchase option had not lapsed as of September 30, 2015, shall be released from the repurchase option on the third anniversary of the original effective date of the agreement. The remaining 25% of the shares shall be released from the repurchase option on the fourth anniversary of the original effective date.

The following is a summary of restricted shares:

Shares	Fair	Shares
Issued	Value	Vested
307,876	\$ 604,385	96,211
32,408	1,469	9,452
81,020	207,257	33,083
129,633	260,514	32,408
72,918	259,288	8,608
293,000	439,500	-
36,200	54,300	-
300,000	1,068,700	-
40,000	68,000	-
60,000	251,400	-
8,000	33,600	-
1,361,055	\$ 3,248,413	179,762
	Issued 307,876 32,408 81,020 129,633 72,918 293,000 36,200 300,000 40,000 60,000 8,000	Issued     Value       307,876     \$ 604,385       32,408     1,469       81,020     207,257       129,633     260,514       72,918     259,288       293,000     439,500       36,200     54,300       300,000     1,068,700       40,000     68,000       60,000     251,400       8,000     33,600

In relation to the above restricted stock agreements for the three months ended June 30, 2016, the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period May 12, 2014 (Inception) through June 30, 2015, the Company recorded stock-based compensation expense for the shares that have vested, as follows:

For the Three Months Ended June 30, 2016	For the Year Ended June 30, 2016	For the Year Ended June 30, 2015	For the Year Ended March 31, 2016	For the Period from May 12, 2014 (Inception) through March 31, 2015
\$ 428,678	\$ 821,617	\$ 78,925	\$ 465,616	\$ 6,219

As of June 30, 2016, the Company had \$2,347,898, in unrecognized stock based compensation expense related to the unvested shares.

#### Note 11. Commitments

#### **Employment agreements**

On June 15, 2015, the Company entered into a three-year employment agreement with the Chief Executive Officer ("CEO"). After the initial three-year term, the agreement will be automatically renewed for successive one-year periods unless terminated by either party on at least 30 days' written notice prior to the end of the then-current term. The CEO's annual base salary is \$150,000 and is subject to increase or decrease on each anniversary as determined by the Board of Directors. The CEO is eligible, at the discretion of our Board of Directors, to receive an annual cash bonus of up to 100% of the annual base salary, which may be based on the Company achieving certain operational, financial or other milestones (the "Milestones") that may be established by the Board of Directors. The CEO is entitled to receive stock options or other equity incentive awards under the 2015 Plan as and when determined by the Board, and is entitled to receive perquisites and other fringe benefits that may be provided to, and is eligible to participate in any other bonus or incentive program established by the Company, for the executives. The CEO and his dependents are also entitled to participate in any of the employee benefit plans subject to the same terms and conditions applicable to other employees. The CEO will be entitled to be reimbursed for all reasonable travel, entertainment and other expenses incurred or paid by him in connection with, or related to, the performance of his duties, responsibilities or services under his employment agreement, in accordance with policies and procedures, and subject to limitations, adopted by us from time to time. In the event that the CEO is terminated by the Company without Cause (as defined in his employment agreement) or he resigns for Good Reason (as defined in his employment agreement) during the term of his employment, the CEO would be entitled to (x) an amount equal to his annual base salary then in effect (payable in accordance with the Company's normal payroll practices) for a period of 24 months commencing on the effective date of his termination (the "Severance Period") (in the case of termination by the executive for Good Reason, reduced by any cash remuneration paid to him because of any other employment or selfemployment during the Severance Period), and (y) if and to the extent the Milestones are achieved for the annual bonus for the year in which the Severance Period commences (or, in the absence of Milestones, the Board of Directors has, in its sole discretion, otherwise determined an amount of the CEO's annual bonus for such year), an amount equal to such annual bonus pro-rated for the portion of the performance year completed before the CEO employment terminated, (z) any unvested stock options, restricted stock or similar incentive equity instruments will vest immediately. For the duration of the Severance Period, the CEO will also be eligible to participate in our benefit plans or programs, provided the CEO was participating in such plan or program immediately prior to the date of employment termination, to the extent permitted under the terms of such plan or program (collectively, the "Termination Benefits"). If the CEO's employment is terminated during the term by the Company for Cause, by the CEO for any reason other than Good Reason or due to his death, then he will not be entitled to receive the Termination Benefits, and shall only be entitled to the compensation and benefits which shall have accrued as of the date of such termination (other than with respect to certain benefits that may be available to the CEO as a result of a Permanent Disability (as defined in his employment agreement).

On June 15, 2015, the Company also entered into employment agreements with each of the Vice President of Business Development, the Vice President of Operations, and the Chief Financial Officer. Each of these employment agreements has substantially the same terms as that of the CEO described above, except as follows:

			Eligible Bonus	
			% of	Severance
	Term	Base Salary	Base Salary	Period
Vice President of Business Development	2 years	\$ 136,000	50%	6 months
Vice President of Operations	2 years	\$ 136,000	50%	6 months
Chief Financial Officer	2 years	\$ 145,000	50%	6 months

In addition, in accordance with each such employment agreement, each of these executives received a restricted stock award under the 2015 Plan for the number of shares of the Company's common stock shown below. These restricted stock awards are subject to a repurchase option in favor of the Company that lapses over a four-year period, as follows: the repurchase option on 50% of the shares will lapse at the end of two years from date of issuance, and the repurchase option on 25% of the shares will lapse at the end of each of the third and fourth years from date of issuance.

	Number of Shares		
	of	Gra	ant Date Fair
	<b>Restricted Stock</b>		Value
Vice President of Business Development	110,000	\$	165,000
Vice President of Operations	38,000	\$	57,000
Chief Financial Officer	145,000	\$	217,500

## **Operating leases**

In July 2014, Akoustis, Inc. entered into a 24-month lease agreement for office space located in Cornelius, North Carolina, terminating on June 30, 2016. Under the agreement, total annual rent is \$24,000 with the option to renew the lease for two additional one year terms.

In April 2015, Akoustis, Inc. entered into a new lease agreement for office space in Huntersville, NC. The lease is for a three-year term with monthly base rent payments of approx. \$3,800 and requires a deposit of \$10,000. At the time of the execution of the new lease, the original lease for the existing office space had 14 months remaining on the existing two-year agreement. Akoustis, Inc. negotiated with the landlord to pay \$16,000 for an eight-month termination fee, which includes rent through May 15, 2015.

The operating leases provide for annual real estate tax and cost of living increases and contain predetermined increases in the rentals payable during the term of the lease. The aggregate rent expense is recognized on a straight-line basis over the lease term. The total lease rental expense was \$13,822 for the three months ended June 30, 2016.

The total lease rental expense was \$55,186, \$42,808, \$66,556 and \$19,613 for the years ended June 30, 2016, June 30, 2015, March 31, 2016 and the period May 12, 2014 (Inception) through March 31, 2015, respectively.

Total future minimum payments required under the new operating lease are as follows.

Year Ending June 30,	
2017	\$ 47,203
2018	40,314
	\$ 87,517

#### Note 12. Related Party Transactions

#### Offering and convertible notes

Akoustis, Inc. was founded on May 12, 2014. In June 2014, the founders and angel investors contributed \$530,000 in a series-seed equity financing.

In March 2015, the Company executed a stock purchase agreement for \$35,000 with an investor to offset legal and audit expenses related to the Merger and private placement offering. In April 2015, one of the convertible noteholders converted \$10,000 of his convertible note into shares of Akoustis, Inc. Common Stock in order to enable the Company to qualify for additional matching funds from NSF. As a result, the net note investment remaining was \$645,000, which, in accordance with the terms of the convertible notes, converted into Common Stock of the Company on the same terms as the other investors in the Company's private placement offering referred to below, at a conversion price of \$1.50 per share.

Of the \$530,000 raised by Akoustis, Inc., in June 2014, the CEO was the largest investor at \$175,000. The CEO also purchased \$200,000 principal amount of Akoustis, Inc., convertible notes in March 2015 and in addition, he participated in the 2015 Offering, purchasing 134,000 shares of Common Stock for an aggregate purchase price of \$201,000 (of which \$200,000 was paid by conversion of the convertible note). He also participated in the 2016 Offering, purchasing 93,750 shares of Common Stock for an aggregate purchase price of \$150,000.

Furthermore, a firm owned by the CEO (Raytech, LLC) loaned Akoustis, Inc., \$30,000 to assist in purchase of test and measurement equipment required to evaluate the performance of the technology demonstrators. The loan was a 12-month simple interest note and was repaid in full in March 2015.

A Director since May 22, 2015 participated in the \$530,000 equity financing of Akoustis, Inc., in June 2014 by investing \$50,000 and participated in the 2015 Offering, purchasing 17,000 shares of Common Stock for an aggregate purchase price of \$25,500.

The Vice President of Operations since May 18, 2015, received payments for consulting services of \$27,426 for Akoustis, Inc. under an independent contractor agreement from May 14, 2014 to May 18, 2015 when he became an employee of the Company. In addition, the Vice President of Operations since May 18, 2015, participated in the 2015 Offering, purchasing 17,000 shares of Common Stock for an aggregate purchase price of \$25,500 and participated in the 2016 Offering, purchasing 6,250 shares of Common Stock for an aggregate purchase price of \$10,000.

A Director since May 22, 2015, participated in the \$530,000 financing of Akoustis, Inc., in June 2014 by investing \$100,000. He also purchased \$225,000 principal amount of Akoustis, Inc., convertible notes in March 2015. and at Akoustis, Inc.'s request and to qualify Akoustis, Inc. for an NSF matching award in April 2015, he also purchased 21 shares of Akoustis, Inc.'s Common Stock pre-Merger (6,806 shares of our Common Stock post-Merger) for an aggregate purchase price of \$10,000 paid by partial conversion of the convertible note. In addition, the Director participated in the 2015 Offering, purchasing 144,000 shares of Common Stock for an aggregate purchase price of \$216,000 (of which \$215,000 was paid by conversion of the convertible note) and he also participated in the 2016 Offering, purchasing 35,000 shares of Common Stock for \$56,000.

The brother of the CEO participated in the \$530,000 equity financing of Akoustis, Inc., in June 2014 by investing \$80,000. The CEO's brother also purchased \$130,000 principal amount of Akoustis, Inc., convertible notes in March 2015 and participated in the 2015 Offering, purchasing 90,000 shares of Common Stock for an aggregate purchase price of \$135,000 (of which \$130,000 was paid by conversion of the convertible note). He also participated in the 2015 Offering, purchasing 100,000 shares of Common Stock for an aggregate purchase price of \$150,000.

A stockholder, who beneficially owns approximately 15.4% of the Common Stock as of June 27, 2016, participated in the 2015 Offering, purchasing 135,000 shares of Common Stock for an aggregate purchase price of \$202,500 and participated in the 2016 Offering purchasing 250,000 shares of Common Stock for \$400,000. The stockholder is also a party to the Registration Rights Agreement with respect to all of his shares.

A Director since May 22, 2015 and Co-Chairman since May 11, 2016 participated in the 2016 Offering, purchasing 125,000 shares of Common Stock for an aggregate purchase price of \$200,000.

A Director since May 22, 2015 and Co-Chairman since May 11, 2016 participated in the 2016 Offering, purchasing 10,000 shares of Common Stock for an aggregate purchase price of \$16,000.

Furthermore, AEG Consulting, a firm owned by a Co-Chairman received \$4,013, \$10,238, \$7,700, \$9,463 and \$3,462 for consulting fees for the three months ended June 30, 2016, for the years ended June 30, 2016, June 30, 2015 and March 31, 2016, and the period May 12, 2014 (Inception) through March 31, 2015, respectively.

The Chief Financial Officer since June 15, 2015, and VP of Business Development since May 6, 2015 participated in the 2016 Offering. The CFO purchased 9,375 of Common Stock for an aggregate purchase price of \$15,000 while the VP of Business Development purchased 6,250 shares of Common Stock for an aggregate purchase price of \$10,000.

#### Inventory Purchase

In March 2016, the Company purchased inventory from Big Red LLC ("Big Red"), a company formed by the CEO, the brother of the Company's CEO, the VP of Operations and one additional party. The transaction for \$43,544 was executed so the Company could pursue commercialization of the amplifier inventory purchased. The Company will utilize this inventory and related technology to process and sell the amplifiers. The CEO and VP of Operations assigned their interests in Big Red to other parties in March of 2016.

## License Agreement

In April 2016, the Company entered into a license agreement with Big Red. The license agreement was executed so that the Company could pursue commercialization of amplifier inventory purchased from Big Red in March 2016. The Company will utilize this inventory and related technology to process and sell the amplifiers. Future revenue from sales utilizing the amplifier technology will result in a license fee paid to Big Red according to the following schedule:

Net Sales	Royalty Percentage
\$0 - \$500,000	5.00%
\$500,000 - \$1,000,000	4.00%
\$1,000,000 - \$2,000,000	3.50%
\$2,000,000 - \$5,000,000	3.00%
\$5,000,001 and over	2.00%

## Note 13. Income Taxes

The Company had no income tax expense due to operating losses incurred for the three months ended June 30, 2016 and the years ended June 30, 2016 and March 31, 2016 and the period from May 14, 2014 (Inception) through March 31, 2015.

The provision for/(benefit from) income tax differs from the amount computed by applying the statutory federal income tax rate to income before the provision for/(benefit from) income taxes. The sources and tax effects of the differences are as follows:

	Three Months Ended June 30, 2016	For the Year Ended June 30, 2016	For the Year Ended June 30, 2015	For the Year Ended March 31, 2016	For the Period May 12, 2014 (Inception) Through March 31, 2015
Income taxes at Federal statutory rate	(34.00)%	(34.00)%	(34.00)%	(34.00)%	(34.00)%
State income taxes, net of Federal income					
tax benefit	(2.63)%	(2.60)%	(2.64)%	(2.54)%	(3.96)%
Permanent differences	0.06%	0.22%	4.10%	1.06%	0.00%
Change in Valuation Allowance	36.57%	36.09%	32.54%	35.32%	37.96%
State tax rate change	0.00%	0.29%	0.00%	0.16%	0.00%
Income Tax Provision	0.00%	0.00%	0.00%	0.00%	0.00%

The tax effects of temporary differences that give rise to the Company's deferred tax assets and liabilities are as follows:

	June 30, 2016	June 30, 2015	March 31, 2016	March 31, 2015
Net Operating Loss Carryforwards	\$ 1,711,488	\$ 368,961	\$ 1,264,686	\$ 159,721
Share-based compensation	396,264	69,524	236,645	-
Change in derivative liability	315,205	-	-	-
Other	(22,365)	9,713	(21,324)	9,713
	2,400,592	448,198	1,480,007	169,434
Valuation Allowance	(2,400,592)	(448,198)	(1,480,007)	(169,434)
Net Deferred Tax Assets	\$ -	\$ -	\$	\$

At June 30, 2016, the Company had approximately \$4,671,000 of federal and state net operating loss carryovers that may be available to offset future taxable income.

The net operating loss carry overs, if not utilized, will expire in stages beginning 2035.

Based on a history of cumulative losses at the Company and the results of operations for the years ended June 30, 2016 and March 31, 2016, the Company determined that it is more likely than not it will not realize benefits from the deferred tax assets. The Company will not record income tax benefits in the financial statements until it is determined that it is more likely than not that the Company will generate sufficient taxable income to realize the deferred income tax assets. As a result of the analysis, the Company determined that a full valuation allowance against the deferred tax assets is required. The net change in the valuation allowance during the year ended June 30, 2016 was an increase of approximately \$1,952,000.



Due to the merger on May 22, 2015, Akoustis Technologies Inc.'s previous net operating losses may be significantly limited. The Company has not performed a detailed analysis to determine whether an ownership change under IRC Section 382 or similar rules has occurred. The effect of an ownership change would be the imposition of annual limitation on the use of NOL carryforwards attributable to periods before the change. Any limitation may result in expiration of a portion of the NOL before utilization. The Company recognizes interest and penalties related to uncertain tax positions in selling, general and administrative expenses. The Company has not identified any uncertain tax positions requiring a reserve as of June 30, 2016.

## 14. Transition Period Comparative Data

	Jı	ended June 30, 2016 Ju		Three months ended June 30, 2015 (Unaudited)	
Operating Data:					
Expenses					
Research and development	\$	709,314	\$	228,125	
General and administrative		968,734		625,917	
		1,678,048		854,042	
Other income (expenses)					
Grant income		20,500		29,999	
Interest income		186		175	
Change in fair value of warrant derivative liability		(860,275)		1,571	
Total other income (expenses)		(839,589)	_	31,745	
Net loss for the period	<u>\$</u>	(2,517,637)	\$	(822,297)	
Loss per share - basic and diluted	\$	(0.17)	\$	(0.11)	
Weighted average number of shares outstanding – basic and diluted		15,111,088		7,823,683	
Cash flow Data:					
Net cash used in operating activities	\$	(1,100,342)	\$	(576,492)	
Net cash used in investing activities		(47,215)		(23,378)	
Net cash provided by financing activities		2,572,896		4,241,627	
Net increase in cash for the period	\$	1,425,339	\$	3,641,757	

## Note 15. Subsequent Events

#### Issuance of Restricted Stock

Restricted Stock Awards were executed by two non-executive employees in the amounts of (1) 8,000 common shares on August 9, 2016 and (2) 20,000 common shares on July 6, 2016. Both Restricted Stock Awards are subject to a repurchase option in favor of the Company that lapses over a four-year period, as follows: the repurchase option on 50% of the shares will lapse at the end of two years from the date of issuance, and the repurchase option on 25% of the shares will lapse at the end of the third and fourth years from the date of issuance. The shares were issued to the following groups of individuals:

On August 11, 2016 the Board of Directors approved the issuance of 40,000 common shares to consultants. The shares have a grant date fair value of \$147,600 and vest immediately.

On August 11, 2016, the Board of Directors approved the issuance of the following Restricted Stock Awards for a total of 383,000 common shares. These restricted stock awards are subject to a repurchase option in favor of the Company that lapses over a four-year period, as follows: the repurchase option on 50% of the shares will lapse at the end of two years from the date of issuance, and the repurchase option on 25% of the shares will lapse at the end of the third and fourth years from the date of issuance. The shares were issued to the following groups of individuals:

- a) Four Board Members, including two Co-Chairmen, received 22,000 common shares each
- b) Nine non-executive employees received 172,000 common shares
- c) CEO received 36,000 common shares
- d) CFO received grant for 30,000 common shares
- e) Vice President of Business Development and Vice President of Operations received 20,000 common shares each
- f) One contractor received 10,000 common shares, and
- g) One contractor who is a related party received 7,000 common shares

# AKOUSTIS TECHNOLOGIES, INC.

2,342,856 Shares of Common Stock

PROSPECTUS

December 19, 2016

#### PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

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

Set forth below is an estimate (except for registration fees, which are actual) of the approximate amount of the fees and expenses payable by us in connection with the issuance and distribution of the shares of our Common Stock. The selling stockholders will not be responsible for any of the expenses of this offering.

#### EXPENSE

AMOUNT
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SEC registration fee*	\$ 1,585
Accounting fees and expenses	\$ 15,000
Legal fees and expenses	\$ 20,000
Miscellaneous	\$ 10,000
Total	\$ 46,585

\*The SEC registration fee was previously paid with the filing of the initial registration statement.

## Item 14. 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.

II-2

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 15. Recent Sales of Unregistered Securities.

All share and per share stock numbers in this section relating to the Common Stock of the Company (Akoustis Technologies, Inc.) are after giving effect to the 1.094891-for-one forward split of our Common Stock on April 23, 2015.

On May 22, 2015, we issued options for an aggregate of 160,000 shares of our Common Stock to our four non-employee directors under the 2015 Plan. These issuances were exempt from registration pursuant to Section 4(a)(2) of the Securities Act as not involving any public offering.

#### The 2015 Offering, the First 2016 Offering, and the Second 2016 Offering

The information regarding the 2015 Offering and the 2015 Placement Agent Warrants set forth in "Description of Business — The 2015 Offering" is incorporated herein by reference. The information regarding the First 2016 Offering and the 2016 Placement Agent Warrants set forth in "Description of Business — The First 2016 Offering" is incorporated herein by reference. The information regarding the Second 2016 Offering set forth in "Description of Business — The Second 2016 Offering" is incorporated herein by reference.

## Shares Issued in Connection with the Merger

On May 22, 2015, pursuant to the terms of the Merger Agreement, all of the shares of stock of Akoustis, Inc., were exchanged for 5,500,006 restricted shares of our Common Stock. This transaction was exempt from registration under Section 4(a)(2) of the Securities Act as not involving any public offering. None of the securities were sold through an underwriter and, accordingly, there were no underwriting discounts or commissions involved.

## Restricted Share Awards under the 2015 Plan

Since the Merger, we have issued 487,000 shares of our Common Stock to our directors and executive officers, 356,200 shares of our Common Stock to several employees, and 25,000 shares of our Common Stock to independent contractors under the 2015 Plan. Each of these issuances was exempt from registration under Section 4(a)(2) of the Securities Act, in reliance upon the exemption provided by Regulation D promulgated by the SEC thereunder, and/or in reliance on a "no sale" theory. These issuances constituted transactions by an issuer not involving any public offering, were made only to persons with access to information about the Company and, with respect to certain issuances made to employees, as bonuses in exchange for no consideration. None of the securities were sold through an underwriter and, accordingly, there were no underwriting discounts or commissions involved.

#### **Shares Issued to Consultants**

On December 9, 2015, pursuant to the terms of an Independent Consulting Agreement between the Company, The Del Mar Consulting Group, Inc. ("Del Mar") and Alex Partners, LLC ("Alex Partners"), we issued 138,000 restricted shares of our Common Stock to Del Mar and 92,000 restricted shares of Common Stock to Alex Partners. In March 2016, the above consulting agreements originally executed in December 2015 were amended so that the consultants would receive shares of Common Stock over the remaining term of the agreement in lieu of the monthly cash retainer. Pursuant to the amended agreement, the Company granted an aggregate of 60,000 restricted shares to the two consultants with a fair value of \$126,600 at March 31, 2016.

In August 2016, pursuant to the terms of a consulting agreement between the Company and Integra Consulting Group, LLC ("Integra"), we issued 40,000 shares of our Common Stock to Integra Consulting in partial consideration for consulting services provided by Integra to the Company.

These issuances were exempt from registration pursuant to Section 4(a)(2) of the Securities Act as not involving any public offering and were only made after the consultants made certain representations and warranties to the Company and had an opportunity to ask questions of our officers. None of the securities were sold through an underwriter and, accordingly, there were no underwriting discounts or commissions involved.

#### Sales of Unregistered Securities of Akoustis, Inc., prior to the Merger

Share and per share stock numbers relating to stock of Akoustis, Inc. issued prior to the Merger on May 22, 2015 have not been adjusted to reflect the Merger, in which each share of Akoustis, Inc. stock outstanding at the time of the Merger was automatically converted into 324.082 shares of our Common Stock.

## Common Stock.

On May 12, 2014, Akoustis, Inc., issued 8,050 shares of its common stock to its founders, Jeffrey Shealy, and Lora Shealy, for \$1 and an in-kind assignment of certain assets to Akoustis, Inc.

Between June 2014 and May 15, 2015, Akoustis, Inc. issued 1,925 shares of its common stock to several independent contractors, including Steven Denbaars, Mark Boomgarden and Arthur Geiss, pursuant to Akoustis, Inc.'s 2014 Stock Plan in consideration of business and consulting services.

In March 2015, Akoustis, Inc. sold to an accredited investor 1,675 shares of its common stock at a price of \$35,000.

In April 2015, Akoustis, Inc. sold to an accredited investor 21 shares of its common stock at a price of \$10,000, paid by partial conversion of a convertible note.

## Series Seed Preferred Stock.

On June 16, 2014, Akoustis, Inc. sold 5,300 shares of its Series Seed Preferred Stock, at a purchase price of \$100 per share, to its directors and private investors, each of whom qualified as an accredited investor pursuant to Regulation D under the Securities Act. The aggregate proceeds from the sale of Series Seed Preferred Stock were \$530,000.

## Convertible Notes.

During March 2015, Akoustis, Inc. issued and sold convertible promissory notes (the "Notes") to four investors, including its Chief Executive Officer, in the aggregate principal amount of \$655,000, with a maturity date of December 31, 2015. The Notes carried no interest if paid on the Maturity Date. \$10,000 principal amount of the Notes was converted into 21 shares of Akoustis, Inc., common stock as described above. Pursuant to the mandatory conversion provision of the Notes, the remaining aggregate of \$645,000 principal amount of the Notes was automatically converted into shares of the Company's Common Stock by their terms upon closing of the 2015 Offering and Merger, at a conversion price per share equal to the 2015 Offering Price of \$1.50 per share.

Each of these issuances by Akoustis, Inc., was exempt from registration under Section 4(a)(2) of the Securities Act, and/or in reliance upon the exemption provided by Regulation D promulgated by the SEC thereunder, as transactions by an issuer not involving any public offering. None of these securities were sold through an underwriter and, accordingly, there were no underwriting discounts or commissions involved.

## Item 16. Exhibits and Financial Statement Schedules.

The exhibits listed in the accompanying Exhibit Index are filed as a part of this post-effective amendment on Form S-1.

## Item 17. Undertakings.

- (a) The undersigned registrant hereby undertakes:
  - 1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
    - i. To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

ii. To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

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.

2. That, for the purpose of determining any liability under the Securities Act of 1933, 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) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities, other than the payment by the registrant of expenses incurred and paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding, is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- (c) Each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement that was made in the registration statement or prospectus that was part of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

II-6

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant 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 December 19, 2016.

#### **AKOUSTIS TECHNOLOGIES, INC.**

By:	/s/ Jeffrey B. Shealy
Name:	Jeffrey B. Shealy
Title:	President and Chief Executive Officer (Principal Executive
	Officer)
By:	/s/ Cindy C. Payne
Name:	Cindy C. Payne
Title:	Chief Financial Officer (Principal Financial Officer and
	Principal Accounting Officer)

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Jeffrey B. Shealy and Cindy C. Payne, or either of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his or her name, place and stead, in any and all capacities, to sign any or all amendments or supplements to this registration statement and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents or either one of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully as to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents, or any of them, or his or her substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on December 19, 2016.

/s/Jeffrey B. Shealy Jeffrey B. Shealy President, Chief Executive Officer, and Director (Principal Executive Officer)

/s/ Arthur E. Geiss Arthur E. Geiss Co-Chairman of the Board

/s/ Steven P. Denbaars Steven P. Denbaars Director /s/ Cindy C. Payne

Cindy C. Payne Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

/s/ Jerry D. Neal

Jerry D. Neal Co-Chairman of the Board

/s/ Jeffrey K. McMahon

Jeffrey K. McMahon Director

## EXHIBIT INDEX

Exhibit Number	Description
2.1	Agreement and Plan of Merger and Reorganization, dated as of May 22, 2015, by and among the Registrant, Acquisition Sub and Akoustis, Inc. (incorporated by reference from Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
2.2	Plan of Conversion, dated December 15, 2016 (incorporated by reference from Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.1	Certificate of Incorporation of the Registrant (incorporated by reference from Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.2	By-Laws of the Registrant (incorporated by reference from Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.3	Certificate of Conversion of the Registrant (incorporated by reference from Exhibit 3.3 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.4	Articles of Conversion of the Registrant (incorporated by reference from Exhibit 3.4 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
3.5	Certificate of Merger of Acquisition Sub with and into Akoustis, Inc., filed May 22, 2015 (incorporated by reference from Exhibit 3.3 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
5.1*	Legal opinion of Womble Carlyle Sandridge & Rice LLP
10.1	Split-Off Agreement, dated as of May 22, 2015, by and among the Registrant, Danlax Enterprise Corp. and Ivan Krikun (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
10.2	General Release Agreement, dated as of May 22, 2015, by and among the Registrant, Danlax Enterprise Corp. and Ivan Krikun (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
10.3	Indemnification Shares Escrow Agreement, dated as of May 22, 2015, by and among the Registrant, Jeffrey B. Shealy, and CKR Law LLP, as Escrow Agent <i>(incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)</i>

10.4	Form of Lock-Up and No Short Selling Agreement between the Registrant and the officers, directors and shareholders party
	thereto (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the SEC on May
	29, 2015)

- 10.5 Form of 2015 Subscription Agreement between the Registrant and the investors party thereto *(incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)*
- 10.6 Form of 2015 Placement Agent Warrant for Common Stock of the Registrant in connection with the Registrant's 2015 private placement offering (incorporated by reference to Exhibit 10.8 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
- 10.7 Form of 2015 Registration Rights Agreement (incorporated by reference to Exhibit 10.9 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
- 10.8<sup>†</sup> Akoustis Technologies, Inc. 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.10 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
- 10.9<sup>†</sup> Form of Stock Option Agreement under the 2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.11 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
- 10.10<sup>†</sup> Akoustis, Inc. 2014 Stock Plan (incorporated by reference to Exhibit 10.10 to the Registrant's Transition Report on Form 10-K filed with the SEC on October 31, 2016)
- 10.11<sup>†</sup> Form of Restricted Stock Purchase Agreement under the 2014 Stock Plan between the Registrant (as assignee of Akoustis, Inc.) and each of Steve DenBaars, Mark Boomgarden and Arthur Geiss *(incorporated by reference to Exhibit 10.12 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)*
- 10.12 Joint Development Agreement, dated February 27, 2015, between Akoustis, Inc. and Global Communication Semiconductors, LLC (incorporated by reference to Exhibit 10.13 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)
- 10.13 Foundry Agreement, dated February 27, 2015, between Akoustis, Inc. and Global Communication Semiconductors, LLC (incorporated by reference to Exhibit 10.14 to the Registrant's Current Report on Form 8-K filed with the SEC on May 29, 2015)

- 10.14<sup>†</sup> Employment Agreement between the Registrant and Jeffrey Shealy dated as of June 15, 2015 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on June 19, 2015)
- 10.15<sup>†</sup> Employment Agreement between the Registrant and David M. Aichele dated as of June 15, 2015 (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the SEC on June 19, 2015)
- 10.16<sup>†</sup> Employment Agreement between the Registrant and Mark Boomgarden dated as of June 15, 2015 (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed with the SEC on June 19, 2015)
- 10.17<sup>†</sup> Employment Agreement between the Registrant and Cindy C. Payne dated as of June 15, 2015 (*incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K filed with the SEC on June 19, 2015*)
- 10.18<sup>†</sup> Form of Restricted Stock Agreement between the Registrant and each of Mark Boomgarden, Dave Aichele and Cindy Payne (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K filed with the SEC on June 29, 2016)
- 10.19<sup>†</sup> Form of Amendment to Restricted Stock Purchase Agreement between the Registrant and each of Steve DenBaars and Mark Boomgarden (*incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K filed with the SEC* on June 29, 2016)
- 10.20 Form of 2016 Subscription Agreement between the Registrant and the investors party thereto (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on April 20, 2016)
- 10.21 Form of 2016 Placement Agent Warrant for Common Stock of the Registrant in connection with the Registrant's 2016 private placement offering (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K filed with the SEC on April 20, 2016)
- 10.22 Form of 2016 Registration Rights Agreement (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on March 11, 2016)

- 10.23 Form of Registration Rights Agreement for the Second 2016 Offering (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on November 25, 2016)]
- 10.24<sup>†</sup> Akoustis Technologies, Inc. 2016 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on December 16, 2016)
- 21.1 Subsidiaries of the Registrant (incorporated by reference to Exhibit 21.1 to the Registrant's Annual Report on Form 10-K filed with the SEC on June 29, 2016)
- 23.1\* Consent of Independent Registered Accounting Firm
- 24.1\* Power of Attorney (included on Signature Page)
- 23.2\* Consent of Womble Carlyle Sandridge & Rice LLP (included in Exhibit 5.1)
- 101§ Interactive Data Files of Financial Statements and Notes.
- 101.ins§ Instant Document
- 101.sch§ XBRL Taxonomy Schema Document
- 101.cal§ XBRL Taxonomy Calculation Linkbase Document
- 101.def§ XBRL Taxonomy Definition Linkbase Document
- 101.lab§ XBRL Taxonomy Label Linkbase Document
- 101.pre§ XBRL Taxonomy Presentation Linkbase Document
- \* Filed herewith
- † Management contract or compensatory plan or arrangement

## [Letterhead of Womble Carlyle Sandridge & Rice, LLP]

December 19, 2016

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

Re: Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 (File No. 333-212508)

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 above-referenced Post-Effective Amendment No. 1 to the Registration Statement on Form S-1 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), filed by the Company with the Securities and Exchange Commission (the "Commission"). The Registration Statement relates to the resale by the Company's stockholders of up to 2,342,856 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock"), consisting of up to 2,189,142 outstanding shares of Common Stock (the "Outstanding Shares") and up to 153,714 shares of Common Stock issuable upon the exercise of outstanding Common Stock purchase warrants (the "Warrant Shares" and, together with the Outstanding Shares, the "Selling Stockholder Shares"). This opinion is provided pursuant to the requirements of Item 16(a) of Form S-1 and Item 601(b)(5) of Regulation S-K of the Commission.

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 Selling Stockholder 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 factual matters contained in such certificates.

In connection with such examination, 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:

- 1. The Outstanding Shares are validly issued, fully paid and non-assessable.
- 2. The Warrant Shares, when issued and delivered against payment therefor in accordance with the terms of the respective Common Stock purchase warrants, will be validly issued, fully paid and non-assessable.

This opinion is limited to the Delaware General Corporation Law.

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 an exhibit to the Registration Statement and to any reference to the name of our firm 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 Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Womble Carlyle Sandridge & Rice, LLP

WOMBLE CARLYLE SANDRIDGE & RICE A Limited Liability Partnership

#### **INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT**

We consent to the inclusion in this Registration Statement of Akoustis Technologies, Inc. on Post-Effective Amendment No. 1 to Form S-1, File No. 333-212508, of our report dated October 31, 2016, 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. as of June 30, 2016 and 2015, March 31, 2016 and 2015 and for the three months ended June 30, 2016, the years ended June 30, 2016 and 2015, the year ended March 31, 2016 and the period from May 12, 2014 (inception) through March 31, 2015, which report appears in the Prospectus, which is part of this Registration Statement. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Marcum llp

Marcum llp New York, NY December 16, 2016