This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, but the information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, dated January 24, 2024

# PRELIMINARY PROSPECTUS SUPPLEMENT (to the Prospectus dated February 15, 2022)

RISK FACTORS USE OF PROCEEDS



## **Shares of Common Stock**

We are offering shares of our common stock. Our common stock is listed on the Nasdaq Capital Market under the symbol "AKTS." On January 19, 2024, the last reported sale price of our common stock on the Nasdaq Capital Market was \$0.74 per share. Certain of our directors, officers and other employees have indicated an intent to participate in the offering through the purchase of approximately \$1.0 million of the shares of our common stock to be sold in the offering.

Investing in our securities involves a high degree of risk. Before making an investment decision, you should carefully review and consider all of the information set forth in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein, including the risks and uncertainties described under "Risk Factors" beginning on page S-7 of this prospectus supplement and the risk factors incorporated by reference into this prospectus supplement and the accompanying prospectus.

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

	Per	
	Share	Total
Public Offering Price	\$	\$
Underwriting Discount (1)	\$	\$
Proceeds to Us (Before Expenses)	\$	\$

(1) See "Underwriting" for additional information about the underwriter compensation arrangements.

We have granted the underwriters an option to purchase up to an additional shares of common stock from us at the public offering price less the underwriting discount, and on the same terms and conditions as set forth above, for 30 days after the date of this prospectus supplement. If the underwriters exercise the option in full, the total public offering price will be approximately \$ , and the total gross proceeds to us, before expenses, will be approximately \$ ...

The underwriters expect to deliver the shares against payment through the facilities of the Depository Trust Company on or about January , 2024.

## **Roth Capital Partners**

The date of this prospectus supplement is January , 2024.

## **Table of Contents**

	Page
Prospectus Supplement	
ABOUT THIS PROSPECTUS SUPPLEMENT	S-ii
PROSPECTUS SUPPLEMENT SUMMARY	S-1
CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION	S-5
<u>RISK FACTORS</u>	S-7
USE OF PROCEEDS	S-11
CAPITALIZATION	S-12
<u>DILUTION</u>	S-13
MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS TO NON-U.S. HOLDERS	S-14
<u>UNDER WRITING</u>	S-18
LEGAL MATTERS	S-21
EXPERTS	S-21
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-21
WHERE YOU CAN FIND MORE INFORMATION	S-22
Base Prospectus	
ABOUT THIS PROSPECTUS	1
FORWARD-LOOKING STATEMENTS	1
THE COMPANY	2

DESCRIPTION OF COMMON STOCK WE MAY OFFER	3
DESCRIPTION OF PREFERRED STOCK WE MAY OFFER	3
DESCRIPTION OF DEBT SECURITIES AND GUARANTEES WE MAY OFFER	6
DESCRIPTION OF WARRANTS WE MAY OFFER	14
DESCRIPTION OF UNITS WE MAY OFFER	15
DESCRIPTION OF RIGHTS WE MAY OFFER	16
CERTAIN PROVISIONS OF DELAWARE LAW AND OF THE COMPANY'S CERTIFICATE OF INCORPORATION AND BYLAWS	17
PLAN OF DISTRIBUTION	18
LEGAL MATTERS	20
EXPERTS	20
WHERE YOU CAN FIND MORE INFORMATION	20
INCORPORATION BY REFERENCE	20

S-i

## ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying base prospectus are part of a registration statement that we filed with the Securities and Exchange Commission (the "SEC") utilizing a "shelf" registration process. Each time we conduct an offering to sell securities under the accompanying base prospectus we will provide a prospectus supplement that will contain specific information about the terms of that offering, including the price, the amount of securities being offered and the plan of distribution. The shelf registration statement was initially filed with the SEC on February 4, 2022 and was declared effective by the SEC on February 15, 2022. This prospectus supplement describes the specific details regarding this offering and may add, update or change information contained in the accompanying base prospectus. The accompanying base prospectus supplement and the accompanying base prospectus are an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. We are not making offers to sell or solicitations to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

If information in this prospectus supplement is inconsistent with the accompanying base prospectus or the information incorporated by reference with an earlier date, you should rely on this prospectus supplement. This prospectus supplement, together with the base prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying base prospectus and any free writing prospectus we have authorized for use in connection with this offering include all material information relating to this offering. We have not, and the underwriters have not, authorized anyone to provide you with different or additional information and you must not rely on any unauthorized information or representations. You should assume that the information appearing in this prospectus supplement, the accompanying base prospectus we have authorized for use in connection with this offering is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should carefully read this prospectus supplement, the accompanying base prospectus and the information and documents incorporated herein by reference herein and therein, as well as any free writing prospectus we have authorized for use in connection with this offering before making an investment decision. See "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information" in this prospectus supplement and in the accompanying base prospectus.

This prospectus supplement and the accompanying base prospectus contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the full text of the actual documents, some of which have been filed or will be filed and incorporated by reference herein. See "Where You Can Find More Information" in this prospectus supplement. We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference into this prospectus supplement or the accompanying base prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

All references in this prospectus supplement and the accompanying base prospectus to our consolidated financial statements include, unless the context indicates otherwise, the related notes.

This prospectus supplement and the accompanying base prospectus contain and incorporate by reference certain market data and industry statistics and forecasts that are based on management's own estimates, independent industry publications, government publications, reports by market research firms and other publicly available information. Although we believe these sources are reliable, estimates as they relate to projections involve numerous assumptions, are subject to risks and uncertainties, and are subject to change based on various factors, including those discussed under "Risk Factors" in this prospectus supplement and the accompanying base prospectus and under similar headings in the documents incorporated by reference herein and therein. Accordingly, investors should not place undue reliance on this information.

Unless the context indicates or requires otherwise, all references in this prospectus supplement to "Akoustis Technologies," "Akoustis," the "Company," "we," "us" and "our" refer to Akoustis Technologies, Inc., a Delaware corporation, and its wholly owned consolidated subsidiaries, Akoustis, Inc., a Delaware corporation, RFM Integrated Device, Inc., a Texas corporation, and Grinding & Dicing Services, Inc., a California corporation.

This prospectus supplement and accompanying prospectus includes the trademarks of Akoustis Inc., Akoustis<sup>™</sup> and XBAW and XBAW. All references to Akoustis and XBAW in this prospectus supplement and accompanying prospectus are intended to include reference to such trademarks.

S-ii

## PROSPECTUS SUPPLEMENT SUMMARY

This prospectus supplement summary highlights information contained elsewhere in this prospectus supplement, the accompanying base prospectus and the documents incorporated by reference herein and therein. This summary does not contain all of the information that you should consider before deciding to invest in our securities. You should read this entire prospectus supplement and the accompanying base prospectus carefully, including the section entitled "Risk Factors" in this prospectus supplement and our consolidated financial statements and the related notes and the other information incorporated by reference into this prospectus supplement and the accompanying base prospectus, before making an investment decision.

Akoustis® is an emerging commercial product company focused on developing, designing, and manufacturing innovative RF filter solutions for the wireless industry, including for products such as smartphones and tablets, network infrastructure equipment, Wi-Fi Customer Premise Equipment ("CPE") and defense applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RF front-end ("RFFE"). 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. We have developed a proprietary microelectromechanical system ("MEMS") based bulk acoustic wave ("BAW") technology and a unique manufacturing process flow, called "XBAW®", for our filters produced for use in RFFE modules. Our XBAW® filters incorporate optimized high purity piezoelectric materials for high power, high frequency and wide bandwidth operation.

## Plan of Operation

We are developing RF filters for 5G, Wi-Fi and defense bands using our proprietary resonator device models and product design kits (PDKs). As we qualify our RF filter products, we are engaging with target customers to evaluate our filter solutions. Our initial designs target UHB, sub 7 GHz 5G, Wi-Fi and defense bands. We expect our filter solutions will address problems (such as loss, bandwidth, power handling, and isolation) created by the growing number of frequency bands in the RFFE of mobile devices, infrastructure and premise equipment to support 5G, and Wi-Fi. We have prototyped, sampled and begun commercial shipment of our single-band low loss BAW filter designs for 5G frequency bands and 5 GHz and 6 GHz Wi-Fi bands which are suited to competitive BAW solutions and historically cannot be addressed with low-band, lower power handling surface acoustic wave ("SAW") technology. Additionally, through our wholly owned subsidiary, RFMi, we operate a fabless business whereby we make sales of complementary SAW resonators, RF filters, crystal ("Xtal") resonators and oscillators, and ceramic products—addressing opportunities in multiple end markets, such as automotive and industrial applications. We also offer back end semiconductor supply chain services through our wholly owned subsidiary, GDSI, which we acquired in January 2023.

We own and/or have filed applications for patents on the core resonator device technology, manufacturing facility and intellectual property ("IP") necessary to produce our RF filter chips and operate as a "pure-play" RF filter supplier, providing discrete filter solutions direct to Original Equipment Manufacturers ("OEMs") and aligning with the front- end module manufacturers that seek to acquire high performance filters to expand their module businesses. We believe this business model is the most direct and efficient means of delivering our solutions to the market.

Technology. Our device technology is based upon bulk-mode acoustic resonance, which we believe is superior to surface-mode resonance for high-band and ultra-high-band ("UHB") applications that include 4G/LTE, 5G, Wi-Fi, and defense applications. Although some of our target customers utilize or manufacture the RFFE module, they may lack access to critical UHB filter technology that we produce, which is necessary to compete in high frequency applications.

Manufacturing. We currently manufacture Akoustis' high-performance RF filter circuits, using our first generation XBAW<sup>®</sup> wafer process, in our 125,000-square foot wafer-manufacturing facility located in Canandaigua, New York (the "NY Facility"), which we acquired in June 2017. Our SAW-based RF filter products are manufactured by a third party and sold either directly or through a sales distributor.

Intellectual Property. As of January 15, 2024, our IP portfolio included 101 patents, including a blocking patent that we have licensed from Cornell University. Additionally, as of December 31, 2023, we have 84 pending patent applications. These patents cover our XBAW<sup>®</sup> RF filter technology from raw materials through the system architectures.

By designing, manufacturing, and marketing our RF filter products to mobile phone OEMs, defense OEMs, network infrastructure OEMs, and Wi-Fi CPE OEMs, we seek to enable broader competition among the front-end module manufacturers.

S-1

Since we own and/or have filed applications for patents on the core technology and control access to our intellectual property, we expect to offer several ways to engage with potential customers. First, we intend to engage with multiple wireless markets, providing standardized filters that we design and offer as standard catalog components. Second, we expect to deliver unique filters to customer-supplied specifications, which we will design and fabricate on a customized basis. Finally, we may offer our models and design kits for our customers to design their own filters utilizing our proprietary technology.

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 and engineering of catalog and custom filter design solutions. To succeed across our combined portfolio of Akoustis, XBAW, and RFMi products, we must convince customers in a wide range of industries including mobile phone OEMs, RFFE module manufacturers, network infrastructure OEMs, WiFi CPE OEMs, medical device makers, automotive and defense customers to use our products in their systems and modules. For example, since there are 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 company for XBAW filters.

To help drive our XBAW filter business, we plan to continue to pursue RF filter design and R&D development agreements and potentially joint ventures with target customers and other strategic partners, although we cannot guarantee we will be successful in these efforts. These types of arrangements may subsidize technology development costs and qualification, filter design costs, and offer complementary technology and market intelligence and other avenues to revenue. However, we intend to retain ownership of our core XBAW technology, intellectual property, designs, and related improvements. Across our combined portfolio of Akoustis, XBAW, and RFMi products, we expect to continue development of catalog designs for multiple customers and to offer such catalog products in multiple sales channels.

## Selected Risks Associated with an Investment in the 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 supplement and accompanying prospectus and in the documents incorporated by reference herein. You should carefully consider these risks before making an investment. Some of these risks include:

- We have a history of operating losses and will need to raise significant additional capital to continue our business and operations. If we are unable to secure financing on favorable terms, or at all, to meet our future capital and operating needs, we may be forced to further delay, reduce or eliminate our R&D plan or other operating activities, which would have a material adverse effect on our business and your investment.
- Our failure to meet the minimum bid price for continued listing on The Nasdaq Capital Market could adversely affect our ability to publicly or privately sell equity securities and the liquidity of our common stock.
- Servicing and repaying the debt represented by the \$44.0 million aggregate principal amount of our 6.0% Convertible Senior Notes due 2027 (the "2027 Notes") and a \$4.0 million promissory note issued in connection with our acquisition of GDSI will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

- 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.
- Our products may not be able to be meet the required specifications of customers and achieve qualification for commercial manufacturing in a timely
  manner.
- Claims of infringement, misappropriation or misuse of third party intellectual property, including the lawsuit filed by Qorvo, Inc. in October 2021, that, regardless of merit, has resulted in significant expense.
- 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.

S-2

## **Company Information**

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

#### **Recent Developments**

Selected Preliminary Financial Results for Second Quarter of Fiscal 2024

Below is a summary of certain preliminary estimates regarding our financial results for the quarter ended December 31, 2023. This preliminary financial information is based upon our estimates and is subject to completion of our financial closing procedures. Moreover, this preliminary financial information has been prepared solely on the basis of information that is currently available to, and that is the responsibility of, management. Our independent registered public accounting firm has not audited or reviewed, and does not express an opinion with respect to, this information. This preliminary financial information is not a comprehensive statement of our financial results for the quarter ended December 31, 2023, and remains subject to, among other things, the completion of our financial closing procedures, final adjustments, completion of our internal review and review by our independent registered public accounting firm of our financial statements for the quarter ended December 31, 2023, which may materially impact the results and expectations set forth below.

We expect revenue for the three months ended December 31, 2023 to be in the range of approximately \$6.9 million to \$7.1 million. We recorded revenue of approximately \$5.9 million for the three months ended December 31, 2022.

As of December 31, 2023, we had approximately \$12.9 million of cash and cash equivalents.

Nasdaq Notice Regarding Common Stock

On October 24, 2023, we received a letter from The Nasdaq Stock Market LLC ("Nasdaq") indicating that we no longer meet the minimum bid price requirement set forth in the Nasdaq listing rules because the closing bid price for our common stock was less than \$1.00 for the previous 30 consecutive business days. The letter has no immediate effect on the listing of our common stock on The Nasdaq Capital Market.

Under Nasdaq listing rules, we have a 180-calendar day period, or until April 22, 2024, to regain compliance with the minimum bid price requirement. The minimum bid price requirement will be met if our common stock has a minimum closing bid price of at least \$1.00 per share for a minimum of 10 consecutive business days during the 180-calendar day period, unless Nasdaq exercises its discretion to extend such 10-day period. If we do not regain compliance by April 22, 2024, we may be eligible for an additional 180-calendar day period, subject to satisfying the conditions in the applicable Nasdaq listing rules. We are monitoring the closing bid price of our common stock and will consider options to regain compliance with the minimum bid price requirement. However, there can be no assurance that we will be able to regain compliance with the minimum bid price requirement.

S-3

## The Offering

The following is a brief summary of some of the terms of the offering and is qualified in its entirety by reference to the more detailed information appearing elsewhere in this prospectus supplement and the accompanying base prospectus. For a more complete description of the terms of our common stock, see "Description of Common Stock We May Offer" in the accompanying base prospectus.

Common stock offered by us

shares of our common stock (or shares if the underwriters exercise their over-allotment option in full).

Offering price

\$ per share of common stock.

Common stock to be outstanding immediately after this offering

shares (or shares if the underwriters exercise their over-allotment option in full).

technology, potential strategic transactions and for other general corporate purposes. See "Use of Proceeds."

Purchases by officers and directors Certain of our directors, officers and other employees have indicated an intent to participate in the offering through the

purchase of approximately \$1.0 million of the shares of our common stock to be sold in the offering.

**Risk factors**Investing in our common stock involves a high degree of risk. You should carefully consider the information under "Risk Factors" in this prospectus supplement and the other information included or incorporated by reference in this prospectus

supplement and the accompanying base prospectus for a discussion of factors you should carefully consider before deciding

our business, including for capital expenditures, working capital, research and development, the commercialization of our

to invest in our common stock.

Nasdaq Capital Market symbol "AKTS"

The number of shares of our common stock expected to be outstanding immediately after this offering is based on 75,601,770 shares of common stock outstanding as of January 19, 2024 and excludes as of that date the following:

• options to purchase 3,214,687 shares of common stock (including exercisable options to purchase up to 2,382,038 shares of common stock),

- unvested restricted stock units for up to 5,102,956 shares of common stock (assuming maximum level of achievement of the performance criteria for the
  restricted stock units with market value appreciation conditions ("MVSUs") is achieved), and
- up to approximately 9,897,556 shares of common stock registered for issuance upon the conversion of our 2027 Notes or as payment of interest on the 2027 Notes, as make-whole payments made in connection with certain conversions of the 2027 Notes or as payments made in connection with qualifying fundamental changes of the Company.

S-4

#### CAUTIONARY NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus and documents we have filed with the SEC that are incorporated by reference herein and therein contain forward-looking statements that relate to our plans objectives, estimates, and goals within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). In addition, from time to time we or our representatives have made or will make forward-looking statements in various other filings that we make with the SEC or in other documents, including press releases or other similar announcements. Any and all statements contained in this prospectus supplement and the accompanying prospectus that are not statements of historical fact may be deemed to be forward-looking statements. Terms such as "may," "will," "might," "would," "should," "could," "project," "estimate," "predict," "potential," "strategy," "anticipate," "attempt," "develop," "plan," "help," "seek," "believe," "continue," "intend," "expect," "future," and terms of similar import (including the negative of any of the foregoing) may identify forward-looking statements. However, not all forward-looking statements may contain one or more of these identifying terms. Forward-looking statements in this prospectus and documents we have filed with the SEC that are incorporated by reference herein and therein may include, without limitation, statements regarding (i) the plans and objectives of management for future operations, including plans or objectives relating to the development of commercially viable RF filters, (ii) preliminary financial results that remain subject to closing procedures and projections 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 the management's discussion and analysis of financial condition or in the results of operations included pursuant to the rules and reg

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 limited operating history;
- our inability to generate revenues or achieve profitability;
- the impact of the Russian-Ukrainian and Middle East conflicts and other sources of volatility on our operations, financial condition and the worldwide economy, including our ability to access the capital markets;
- increases in prices for raw materials, labor, and fuel caused by rising inflation; our inability to obtain adequate financing and sustain our status as a going concern;
- the results of our R&D activities;
- our inability to achieve acceptance of our products in the market:
- general economic conditions, including upturns and downturns in the industry;
- existing or increased competition;
- our inability to successfully scale our New York wafer fabrication facility and related operations while maintaining quality control and assurance and avoiding delays in output;
- contracting with customers and other parties with greater bargaining power and agreeing to terms and conditions that may adversely affect our business;
- the possibility that the anticipated benefits from our business acquisitions will not be realized in full or at all or may take longer to realize than expected;

• the possibility that costs or difficulties related to the integration of acquired businesses' operations will be greater than expected and the possibility of disruptions to our business during integration efforts and strain on management time and resources;

S-5

- risks related to doing business in foreign countries, including rising tensions between the United States and China;
- any cybersecurity breaches or other disruptions compromising our proprietary information and exposing us to liability;
- · our limited number of patents;
- failure to obtain, maintain, and enforce our intellectual property rights;
- claims of infringement, misappropriation or misuse of third party intellectual property, including the lawsuit filed by Qorvo, Inc. in October 2021, that, regardless of merit, has resulted in significant expense;
- our inability to attract and retain qualified personnel;
- the outcome of current and any future litigation; our reliance on third parties to complete certain processes in connection with the manufacture of our products;
- product quality and defects;
- our inability to successfully manufacture, market and sell products based on our technologies;
- our ability to meet the required specifications of customers and achieve qualification of our products for commercial manufacturing in a timely manner;
- our failure to innovate or adapt to new or emerging technologies, including in relation to our competitors;
- our failure to comply with regulatory requirements;
- stock volatility and illiquidity;
- our failure to implement our business plans or strategies;
- our failure to meet the minimum bid price for continued listing on The Nasdaq Capital Market could adversely affect our ability to publicly or privately sell
  equity securities and the liquidity of our common stock;
- our failure to maintain effective internal control over financial reporting;
- our failure to obtain or maintain a Trusted Foundry accreditation or our New York fabrication facility; and
- shortages in supplies needed to manufacture our products, or needed by our customers to manufacture devices incorporating our products.

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 supplement and the accompanying prospectus appears in the sections captioned "Risk Factors" as well as the risk factors described under the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for our most recent fiscal year (together with any material changes thereto contained in subsequent filed Quarterly Reports on Form 10-Q and Current Reports on Form 8-K) and those contained in our other filings with the SEC, which are incorporated by reference in this prospectus and elsewhere in this prospectus supplement and accompanying prospectus. Readers are cautioned not to place undue reliance on forward-looking statements because of the risks and uncertainties related to them and to the risk factors. The forward-looking statements in this prospectus supplement and the accompanying prospectus speak only as of the date hereof and thereof and, except as may be required by law, we do not undertake any obligation to update the forward-looking statements contained in this prospectus supplement or the accompanying prospectus to reflect any new information or future events or circumstances or otherwise.

S-6

## RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should read and consider carefully the following risk factors as well as the risk factors described under the section captioned "Risk Factors" contained in our Annual Report on Form 10-K for our most recent fiscal year (together with any material changes thereto contained in subsequent filed Quarterly Reports on Form 10-Q and Current Reports on Form 8-K) and those contained in our other filings with the SEC, which are incorporated by reference in this prospectus supplement and the accompanying prospectus, together with the other information contained in or incorporated by reference in this prospectus supplement and the accompanying prospectus, including our consolidated financial statements and the related notes. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our common stock. There may be additional risks that we do not presently know of or that we currently believe are immaterial, which could also impair our business and financial position. If any of the events described below were to occur, our financial condition, our ability to access capital resources, our results of operations and/or our future growth prospects could be materially and adversely affected and the value of our common stock could decline. As a result, you could lose some or all of any investment you may make in our common stock.

#### Risks Related to this Offering and Our Common Stock

Because the price per share of our common stock being offered is substantially higher than the book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ per share, representing the difference between the public offering price of \$ per share in this offering and our as adjusted net tangible book value per share after giving effect to the offering. See "Dilution" for a more detailed discussion of the dilution you will incur if you purchase shares of our common stock in this offering.

## Our common stock is thinly traded and our share price has been volatile.

Our common stock has traded on Nasdaq, under the symbol "AKTS," since March 13, 2017. Since that date, our common stock has been relatively thinly traded and at times been subject to price volatility. Recently, from January 1, 2023 to December 31, 2023, the closing price of our common stock on Nasdaq has ranged from \$0.48 to \$4.80 per share and the intra-day sales price of our common stock fluctuated between a reported low sale price of \$0.46 and a reported high sales price of \$4.96 per share.

The trading price of our common stock may be significantly affected by various factors, including quarterly fluctuations in our operating results, changes in investors' and analysts' perception of the business risks and conditions of our business, issuance of additional shares in connections with strategic transactions or acquisitions we may make, our ability to meet the earnings estimates and other performance expectations of financial analysts or investors, unfavorable commentary or downgrades of our stock by equity research analysts, and general economic or political conditions. Additionally, the stock market and development-stage public companies in particular have been subject to extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of such companies. Additionally, technical factors in the public trading market for our common stock may produce price movements that may or may not reflect macro, industry or company-specific fundamentals, including, without limitation, the sentiment of retail investors (including as may be expressed on financial trading and other social media sites), speculation in the press, in the investment community, or on the internet, including on online forums and social media, about us, our industry or our securities, the amount and status of short interest in our common stock (including a "short squeeze"), access to margin debt, trading in options and other derivatives on our common stock and other technical trading factors. We may incur rapid and substantial decreases in our common stock price in the foreseeable future that are unrelated to our operating performance or prospects. There can be no guarantee that the trading price of our common stock will remain at current prices or that future sales of our common stock will not be at prices lower than the prices at which shares of our common stock are sold in this offering.

S-7

The daily trading volume of our common stock has historically been relatively low. If we are unable to develop and maintain a liquid market for our common stock, you may not be able to sell your common stock at prices you consider to be fair or at times that are convenient for you, or at all. This situation may be attributable to a number of factors, including but not limited to the fact that we are a development-stage company that is relatively unknown to stock analysts, stock brokers, institutional investors, and others in the investor community. In addition, investors may be risk averse to investments in development-stage companies. The low trading volume is outside of our control and may not increase or, if it increases, may not be maintained. In addition, following periods of volatility in the market price of a company's securities, litigation has often been brought against that company and we may become the target of litigation as a result of price volatility. Litigation could result in substantial costs and divert our management's attention and resources from our business. This could have a material adverse effect on our business, results of operations and financial condition.

Our failure to meet the minimum bid price for continued listing on The Nasdaq Capital Market could adversely affect our ability to publicly or privately sell equity securities and the liquidity of our common stock.

On October 24, 2023, we received notification from the Listing Qualifications Department of The Nasdaq Stock Market, or Nasdaq, stating that the Company did not comply with the minimum \$1.00 bid price requirement for continued listing set forth in Nasdaq Listing Rule 5550(a)(2) (the "Bid Price Requirement"). In accordance with Nasdaq listing rules, the Company has been afforded 180 calendar days (until April 22, 2024) to regain compliance with the Bid Price Requirement (the "Initial Compliance Period"). To regain compliance, the closing bid price of the Company's common stock must meet or exceed \$1.00 per share for a minimum of ten consecutive business days during this additional 180-day period, all as described in more detail in the Current Report on Form 8-K filed with the SEC on October 27, 2023. If the Company does not regain compliance by April 22, 2024, the Company may be eligible for an additional grace period. To qualify, the Company must, as of the final day of the Initial Compliance Period, meet the applicable market value of publicly held shares requirement for continued listing and all other applicable standards for initial listing on the Capital Market (except the Bid Price Requirement) based on the Company's most recent public filings and market information and must notify Nasdaq of its intent to cure this deficiency. If the Company meets these requirements, the Nasdaq staff would be expected to grant an additional 180 calendar days for the Company to regain compliance with Bid Price Requirement.

The closing price of our common stock was \$0.74 on January 19, 2024. There can be no assurance that we will regain compliance with the Bid Price Requirement by the April 22, 2024 deadline, or that we will be eligible for the second 180 day compliance period. Our inability to regain compliance with the Bid Price Requirement would materially impair our ability to raise capital. Moreover, if we were unable to regain compliance with the Bid Price Requirement, our common stock would likely then trade only in the over-the-counter market and the market liquidity of our common stock could be adversely affected and its market price could decrease. If our common stock were to trade on the over-the-counter market, selling our common stock could be more difficult because smaller quantities of shares would likely be bought and sold, transactions could be delayed, and we could face significant material adverse consequences, including: a limited availability of market quotations for our securities; reduced liquidity with respect to our securities; a determination that our shares are a "penny stock," which will require brokers trading in our securities to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for our securities; a reduced amount of news and analyst coverage; and a decreased ability to issue additional securities or obtain additional financing in the future. These factors could result in lower prices and larger spreads in the bid and ask prices for our common stock and would substantially impair our ability to raise additional funds and could result in a loss of institutional investor interest and fewer development opportunities for us.

S-8

We have a history of operating losses and will need to raise significant additional capital to continue our business and operations. If we are unable to raise capital or secure financing on favorable terms, or at all, to meet our future capital and operating needs, we may be forced to further delay, reduce or eliminate our R&D plan or other operating activities, which would have a material adverse effect on our business and your investment.

We are experiencing financial and operating challenges. As of December 31, 2023, on a preliminary basis, we had approximately \$12.9 million of cash and cash equivalents. To remain viable, we estimate that we will require significant additional liquidity to fund our cash requirements until we can achieve and maintain profitability that will sustain our operations

We are actively exploring additional sources of liquidity and may seek to raise such capital through, among other means, public or private equity offerings (including sales of our common stock under our at-the-market equity offering program, which we previously suspended but are able to resume at any time, subject to any applicable lock-up restrictions in the Underwriting Agreement), debt financings, real estate- or equipment-based financing arrangements, corporate collaborations and/or licensing arrangements. However, general market conditions or the market price of our common stock may not support these capital raising transactions on terms favorable to us, or at all. In November 2023, we announced that we had undertaken significant expense reductions and cost-saving measures to reduce our operating cash flow burn. If we are unable to obtain adequate financing or financings on terms satisfactory to us when we require it, we may be forced to undertake additional measures, which may include delaying or reducing our R&D plan and/or manufacturing and sales activities, materially curtailing or eliminating our operations, selling or disposing of our rights or assets, pursuing sale or

other strategic transactions, or undergoing restructuring or insolvency proceedings. Factors that could limit our ability to raise additional capital after this offering include, among other matters:

- the expectation that we will continue to incur losses and generate negative cash flows from operations;
- our substantially limited liquidity and capital resources to meet our obligations as they become due;
- the potential that our common stock will be delisted by Nasdaq in the event we fail to regain compliance in a timely manner with the minimum bid price requirement;
- the lawsuit filed by Qorvo, Inc. in October 2021 alleging claims of infringement, misappropriation and misuse of intellectual property and related expenses and disruptions to our business;
- the amounts outstanding under our \$44.0 million principal amount of our 6.0% Convertible Senior Notes due 2027 and a \$4.0 million promissory note issued in connection with our acquisition of GDSI (including the potential we may experience one or more defaults or events of default under such instruments); and
- risks and uncertainties that are described in more detail in the Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of
  Operations sections of our most recent Annual Report on Form 10-K and subsequently filed Quarterly Reports on Form 10-Q.

Any inability to raise adequate funds on commercially reasonable terms could have a material adverse effect on our business, results of operation and financial condition, including the possibility that a lack of funds causes our business to fail and liquidate, resulting in investors losing some or all of their investment.

## Our management will have broad discretion over the use of the net proceeds from this offering which we may not use effectively or in a manner with which you agree

Our management will have broad discretion as to the use of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for our company.

Stockholders may experience dilution of their 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. We are authorized to issue an aggregate of 175,000,000 shares of common stock and 5,000,000 shares of preferred stock. We may issue additional shares of our common stock or other securities that are convertible into or exercisable for our common stock in connection with hiring or retaining employees, future acquisitions, future sales of our securities for capital raising purposes, or for other business purposes. In addition, as of September 30, 2023, options to purchase 3,123,137 shares, of our common stock were outstanding and unvested restricted stock units for up to 5,589,285 shares of common stock (assuming maximum level of achievement of the performance criteria for the MVSUs is achieved) were outstanding. Additionally, up to approximately 12,273,780 shares of common stock are registered for issuance upon the conversion of the 2027 Notes or as payment of interest on the 2027 Notes, as make-whole payments made in connection with certain conversions of the 2027 Notes or as payments made in connection with qualifying fundamental changes of the Company as of such date. The future issuance of additional shares of our common stock may create downward pressure on the trading price of the common stock. We will need to raise additional capital in the near future to meet our working capital raising efforts, including at a price (or exercise prices) below the price you paid for your stock.

S-9

## A large number of shares of common stock issued in this offering may be sold in the market following this offering, which may depress the market price of our common stock.

A large number of shares of common stock issued in this offering may be sold in the public market following this offering, which may depress the market price of our common stock. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common stock and sellers remain willing to sell the shares of common stock. The common stock issued in the offering will be freely tradable without restriction (other than any shares that may be sold to our directors, certain officers or any of their affiliates in this offering, which will be subject to the lock-up restrictions set forth in the section titled "Underwriting") or further registration under the Securities Act.

## We do not anticipate paying dividends on our common stock

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

## If securities or industry analysts issue an adverse opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us adversely change its recommendation regarding our common stock, or provide more favorable relative recommendations about our competitors, the trading price of our common stock could decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause the trading price of our common stock or trading volume to decline.

S-10

## USE OF PROCEEDS

We estimate that our net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise their overallotment option in full), after deducting the underwriting discount and estimated offering expenses payable by us.

research and development, the commercialization of our technology, potential strategic transactions and for other general corporate purposes.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures overall. The amounts and timing of these expenditures will depend on a number of factors, such as the results of our R&D activities, our ability to achieve acceptance of our products in the markets and our ability to achieve the anticipated benefits from our business acquisitions and potential future business acquisitions. As a result, our management will have broad discretion to allocate the net proceeds from this offering.

Pending the uses described above, we intend to invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities such as money market accounts, certificates of deposit, commercial paper, and guaranteed obligations of the U.S. government.

S-11

#### CAPITALIZATION

The following table presents our cash and cash equivalents, certain liabilities and capitalization as of September 30, 2023:

- · on an actual basis; and
- on an as adjusted basis to reflect the issuance and sale of shares of common stock in this offering at a public offering price of \$ per share, after deducting the underwriting discount and estimated offering expenses payable by us.

You should read this table in conjunction with the section entitled "Use of Proceeds" and our condensed consolidated financial statements and related notes included in our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023, which is incorporated by reference in this prospectus supplement.

	As of September 30, 2023 (unaudited)		
	Actual		As Adjusted
	(in	thousands, e	xcept share data)
Cash and cash equivalents	\$	25,787	\$
Convertible notes payable, net	\$	41,488	
Stockholders' equity			
Preferred Stock, par value \$0.001: 5,000,000 shares authorized, none issued and outstanding	\$	_	\$
Common stock, par value \$0.001; 125,000,000 shares authorized (175,000,000 as of 11/2/23); issued and outstanding 72,463,465			
actual and as adjusted		72	
Additional paid-in capital		358,405	
Accumulated deficit		(290,685)	
Total stockholders' equity	\$	67,792	\$
Total liabilities and stockholders' equity	\$	127,147	\$

The foregoing table assumes no exercise of the underwriters' option to purchase additional shares of common stock and is based on 72,463,465 shares of common stock outstanding as of September 30, 2023, and excludes, as of that date, the following:

- options to purchase 3,123,137 shares of common stock (including options then exercisable to purchase up to 2,172,353 shares of common stock);
- unvested restricted stock units for up to 5,589,285 shares of common stock (assuming maximum level of achievement of the performance criteria for the MVSUss achieved); and
- up to approximately 12,273,780 shares of common stock registered for issuance upon the conversion of the 2027 Notes or as payment of interest on the Notes, as make-whole payments made in connection with certain conversions of the Notes or as payments made in connection with qualifying fundamental changes of the Company.

S-12

## DILUTION

If you invest in our common stock, you will experience immediate dilution to the extent of the difference between the price per share you pay in this offering and the net tangible book value per share of our common stock after this offering.

Our net tangible book value as of September 30, 2023 was approximately \$38.7 million, or approximately \$0.53 per share. Net tangible book value per share is determined by subtracting our total liabilities from our total tangible assets and net tangible book value per share is determined by dividing our net tangible book value by the number of shares of common stock outstanding as of September 30, 2023.

After giving effect to the sale of shares of our common stock in this offering at the public offering price of \$ per share, and after deducting the underwriting discount and estimated offering expenses payable by us, our as adjusted net tangible book value as of September 30, 2023 would have been approximately \$ million, or approximately \$ per share. This represents an immediate increase in net tangible book value of approximately \$ per share to our existing stockholders and immediate dilution in net tangible book value of approximately \$ per share to investors participating in this offering.

The following table illustrates this calculation on a per share basis:

Public offering price per share of common stock	\$
Net tangible book value per share as of September 30, 2023	\$ 0.53
Increase per share attributable to investors participating in this offering	\$ 
As adjusted net tangible book value per share after this offering	\$
Dilution per share to investors participating in this offering	\$

If the underwriters exercise in full their option to purchase an additional shares of common stock at the public offering price of \$ per share, our adjusted net tangible book value as of September 30, 2023, after giving effect to this offering, would have been approximately \$ per share, representing an immediate increase in net tangible book value of approximately \$ per share to existing stockholders and immediate dilution in net tangible book value of approximately \$ per share to investors participating in this offering.

The above discussion and table is based on 72,463,465 shares of common stock outstanding as of September 30, 2023 and excludes, as of that date, the following:

- options to purchase 3,123,137 shares of common stock (including options then exercisable to purchase up to 2,172,353 shares of common stock);
- unvested restricted stock units for up to 5,589,285 shares of common stock (assuming maximum level of achievement of the performance criteria for the MVSUss achieved); and
- up to approximately 12,273,780 shares of common stock registered for issuance upon the conversion of the 2027 Notes or as payment of interest on the 2027 Notes, as make-whole payments made in connection with certain conversions of the 2027 Notes or as payments made in connection with qualifying fundamental changes of the Company.

The above illustration of dilution per share to investors participating in this offering assumes no exercise of outstanding options or warrants to purchase our common stock and does not take into account the possible issuance of shares of our common stock in respect of our outstanding convertible notes. The exercise such options or warrants, or such issuance of common stock, could result in further dilution to investors participating in this offering. In addition, we may choose to raise additional capital depending on market conditions, our capital requirements and strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through our sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

S-13

#### MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS TO NON-U.S. HOLDERS

The following discussion is a summary of certain material U.S. federal income tax considerations relevant to Non-U.S. Holders (as defined below) relating to the purchase, ownership and disposition of our common stock issued pursuant to this offering. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the "Code," Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the "IRS," in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations that may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance that the IRS or a court will not take a contrary position to that discussed below regarding the U.S. federal income tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of the Code (generally, property held for investment). This discussion does not purport to be a complete analysis of all potential tax consequences and does not address the effects of other U.S. federal tax laws, such as the U.S. estate and gift tax laws, and any applicable state, local or non-U.S. tax laws or tax treaties. This summary does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment or who have elected to mark securities to market;
- banks, thrifts, regulated investment companies, real estate investment trusts, insurance companies and other financial institutions;
- brokers, dealers or traders in securities or currencies;
- "controlled foreign corporations" or "passive foreign investment companies";
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and partners therein);
- tax-exempt entities, organizations or arrangements, or governmental organizations (or controlled entities thereof);
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any option, warrant, or similar derivative security or otherwise as compensation;
- persons who hold our common stock and have a function currency other than the U.S. dollar;
- persons who hold our common stock required to accelerate the recognition of any item of gross income with respect to such security, as a result of such income being recognized on an applicable financial statement; and
- tax-deferred or other retirement accounts and pension plans.

If an entity or arrangement treated as a partnership or other entities or arrangements that are pass-through entity for U.S. federal income tax purposes holds our common stock, the tax treatment of such partnership or pass-through entity and a partner of the partnership or owner of the pass-through entity will depend on the activities of the partnership or pass-through entity and certain determinations made at the partner or owner level, respectively. Accordingly, partnerships and pass-through entities holding our common stock and the partners or owners in such partnerships or pass-through entities, respectively, should consult their tax advisors regarding the U.S. federal income tax consequences to them in connection with the purchase, ownership and disposition of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

#### Definition of a Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity treated as a corporation that is created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a U.S. court and the control of one or more "United States persons" (within the meaning of Section 7701(a) (30) of the Code), or (ii) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

## Distributions

We do not currently intend to pay any cash dividends on our common stock in the foreseeable future. However, if we make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or Other Taxable Disposition."

Subject to the discussions below on effectively connected income, backup withholding and the Foreign Account Tax Compliance Act ("FATCA"), dividends paid to a Non-U.S. Holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment or fixed base in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI (or applicable successor form or other applicable documentation), certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to an additional branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

## Sale or Other Taxable Disposition

Subject to the discussions below regarding backup withholding and FATCA, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment or fixed base in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are metror.
- our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

S-15

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to an additional branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S.-source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-USRPIs and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is considered "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually or constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period. If we are a USRPHC and either our common stock is not regularly traded on an established securities market or a Non-U.S. Holder holds more than 5% of our common stock, actually or constructively, during the applicable period, such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rule described above.

#### Information Reporting and Backup Withholding

Payments of dividends on our common stock will not be subject to backup withholding at the applicable rate (currently, 24%), provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a U.S. person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to a Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds from the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

S-16

## **FATCA**

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as FATCA) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, these withholding requirements generally currently apply to payments of dividends on our common stock. Although withholding under FATCA would have applied to payments of gross proceeds from the taxable disposition of our common stock on or after January 1, 2019, proposed regulations from the U.S. Department of the Treasury eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on those proposed regulations until final regulations are issued, such that this withholding tax currently will not apply to the gross proceeds from the sale or other disposition of our common stock.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

S-17

#### UNDERWRITING

Roth Capital Partners is acting as the representative of the underwriters listed in the table below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters dated , 2024, we have agreed to sell to each underwriter, and each underwriter has agreed to purchase from us, the respective shares of common stock set forth opposite its name below:

Underwriter
Roth Capital Partners, LLC

Total

The underwriting agreement provides that the obligations of the underwriters to purchase the shares of common stock included in this offering are subject to approval of legal matters by counsel, including conditions contained in the underwriting agreement. The underwriters are obligated to purchase all the shares of common stock if any of the shares of common stock are purchased (other than those covered by the option as described below).

We have granted to the underwriters an option, exercisable for 30 days from the date of the prospectus supplement, to purchase up to an aggregate of additional shares of common stock at the public offering price set forth on the cover page hereof, less underwriting discounts and commissions.

The underwriters propose to offer part of the shares of common stock to the public directly at the public offering price set forth on the cover page of this prospectus supplement and part to dealers at that price less a concession not in excess of \$ per share. After the initial offering of shares of common stock, the offering price and other selling terms may from time to time be varied by the underwriters.

The following table shows the per share and total public offering price, underwriting discounts and commissions that we will pay to the underwriters in connection with this offering and proceeds, before expenses, to us. The amounts are shown assuming both no exercise or full exercise by the underwriters of their option to purchase up to additional shares of our common stock.

	Per Share	No Exercise	Full Exercise
Public offering price	\$	\$	\$
Underwriting discounts and commissions	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

In addition, we estimate that our share of the total expenses of this offering, excluding underwriting discounts and commissions, will be approximately \$ have agreed to reimburse the representative of the underwriters for certain offering expenses up to an aggregate amount of approximately \$100,000.

### **Lock-Up Agreements**

We, our directors and executive officers have agreed to, subject to limited exceptions, for a period of 90 days after the closing of the offering, not to offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of, directly or indirectly any shares of common stock or any securities convertible into or exchangeable for our common stock either owned as of the date of the underwriting agreement or thereafter acquired without the prior written consent of the representative of the underwriters. The representative of the underwriters may, in its sole discretion and at any time or from time to time before the termination of the lock-up period, without notice, release all or any portion of the securities subject to lock-up agreements.

#### Price Stabilization and Short Positions

Until the distribution of shares of common stock is complete, SEC rules may limit the ability of the underwriters to bid for and purchase shares of our common stock. As an exception to these rules, underwriters are permitted to engage in certain transactions which stabilize the price of the shares of common stock, which may include short sales, covering transactions and stabilizing transactions. Short sales involve sales of shares of common stock in excess of the number of shares to be purchased by the underwriters in the offering, which creates a short position. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of common stock from us in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of common stock or purchasing shares of common stock in the open market. In determining the source of shares of common stock to close out the covered short position, the underwriters will consider, among other things, the price of shares of common stock available for purchase in the open market as compared to the share price at which they may purchase through their option to purchase additional shares. "Naked" short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing shares of common stock in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of the shares of common stock made by the underwriters in the open market prior to the completion of the offering.

C 10

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the other underwriter a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Neither we nor the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above might have on our shares of common stock. Any of these activities may have the effect of preventing or retarding a decline in the market price of our shares of common stock. They may also cause the price of the shares of common stock to be higher than the price that would otherwise exist in the open market in the absence of these transactions. The underwriters may conduct these transactions on the Nasdaq or in the over-the-counter market, or otherwise. If the underwriters commence any of these transactions, they may discontinue them at any time without notice.

We expect that delivery of the shares will be made to investors on or about , 2024.

In the ordinary course of their various business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make because of any of those liabilities.

A prospectus supplement in electronic format may be made available on websites maintained by the underwriters. Other than the prospectus supplement in electronic format, the information on any underwriter's website and any information contained in any other website maintained by an underwriter is not part of this prospectus supplement or the accompanying prospectus.

#### Listing

Our common stock is traded on the Nasdaq under the symbol "AKTS."

## **Additional Relationships**

Roth Capital Partners and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing, corporate trust and brokerage activities. Some of the underwriters and their respective affiliates have in the past and may in the future engage in investment banking and other commercial dealings in the ordinary course of business with us or our affiliates and may in the future receive customary fees and commissions, plus out-of-pocket expenses, for these transactions. We may continue to use Roth Capital Partners and its affiliates for various services in the future.

For a period of six months following the closing date of this offering, the representative shall have a right of first refusal to act as exclusive underwriter placement agent in connection with any public or private offering of equity, equity-linked or debt securities. Subject to certain conditions and exceptions.

#### **Selling Restrictions**

## Notice to Prospective Investors in Canada (Alberta, British Columbia, Manitoba, Ontario and Québec Only)

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

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

#### Resale Restrictions

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

## Representations of Purchasers

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

#### Taxation and Eligibility for Investment

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

#### Rights of Action for Damages or Rescission

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

## Personal Information

Prospective Canadian purchasers are advised that: (a) we may be required to provide personal information pertaining to the purchaser as required to be disclosed in Schedule I of Form 45-106F1 under NI 45-106 (including its name, address, telephone number, email address, if provided, and the number and type of securities purchased, the total purchase price paid for such securities, the date of the purchase and specific details of the prospectus exemption relied upon under applicable securities laws to complete such purchase) ("personal information"), which Form 45-106F1 may be required to be filed by us under NI 45-106, (b) such personal information may be delivered to the securities regulatory authority or regulator in accordance with NI 45-106, (c) such personal information is being collected indirectly by the securities regulatory authority or regulator under the authority granted to it under the securities legislation of the applicable legislation, (d) such personal information is collected for the purposes of the administration and enforcement of the securities legislation of the applicable jurisdiction, and (e) the purchaser may contact the applicable securities regulatory authority or regulator by way of the contact information provided in Schedule 2 to Form 45-106F1. Prospective Canadian purchasers that purchase securities in this offering will be deemed to have authorized the indirect collection of the personal information by each applicable securities regulatory authority or regulator, and to have acknowledged and consented to such information being disclosed to the Canadian securities regulatory authority or regulator, and to have acknowledged that such information may become available to the public in accordance with requirements of applicable Canadian laws.

## Language of Documents

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

## S-20

## LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus supplement and accompanying prospectus will be passed upon for us by K&L Gates LLP, Charlotte, North Carolina. Ellenoff Grossman & Schole LLP, New York City, New York, is acting as counsel for the underwriters in connection with this offering.

## **EXPERTS**

The consolidated financial statements of Akoustis Technologies, Inc. and its wholly-owned subsidiaries included in the Company's Annual Report on Form 10-K for the fiscal year ended June 30, 2023 have been audited by Marcum LLP, an independent registered public accounting firm, as stated in its report which is incorporated by reference herein, and has been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

## INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC permits us to "incorporate by reference" the information and reports we file with it. This means that we can disclose important information to you by referring to another document. The information that we incorporate by reference is considered to be part of this prospectus supplement, and later information that we file with the SEC automatically updates and supersedes this information. We incorporate by reference the documents listed below, except to the extent information in those documents is different from the information contained in this prospectus supplement, and all future documents filed with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until we terminate the offering of these securities:

- Our Annual Report on Form 10-K for the fiscal year ended June 30, 2023, which was filed on September 6, 2023;
- Our Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2023, which was filed on November 13, 2023;
- Our Current Reports on Form 8-K filed on September 29, 2023, October 27, 2023, and November 2, 2023;

- The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended June 30, 2023 from our definitive proxy statement on <a href="Schedule 14A">Schedule 14A</a> (other than information furnished rather than filed), filed with the SEC on September 19, 2023;
- The description of our common stock contained in our Registration Statement on Form 8-A (File No. 001-38029) filed with the SEC on March 10, 2017, including any amendment or report filed for the purpose of updating such description; and
- All documents we file with the SEC under Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus supplement and prior to the termination of this offering made by way of this prospectus supplement.

S-21

To the extent that any statement in this prospectus supplement is inconsistent with any statement that is incorporated by reference and that was made on or before the date of this prospectus supplement, the statement in this prospectus supplement shall supersede such incorporated statement. The incorporated statement shall not be deemed, except as modified or superseded, to constitute a part of this prospectus supplement or the registration statement. Statements contained in this prospectus supplement as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to our various filings made with the SEC.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Akoustis Technologies, Inc. 9805 Northcross Center Court, Suite A Huntersville, North Carolina 28078 Attention: Corporate Secretary Telephone: (704) 997-5735

Copies of the above reports may also be accessed from our website at ir.akoustis.com/sec-filings. We have authorized no one to provide you with any information that differs from that contained in this prospectus supplement. Accordingly, you should not rely on any information that is not contained or incorporated by reference in this prospectus supplement and the accompanying base prospectus. You should not assume that the information in this prospectus supplement is accurate as of any date other than the date of the front cover of this prospectus supplement.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus supplement will be deemed modified, superseded or replaced for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement modifies, supersedes or replaces such statement.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement under the Securities Act (SEC File No. 333-262540) that registers the securities offered hereby. The registration statement, including the exhibits and schedules attached thereto and the information incorporated by reference therein, contains additional relevant information about the securities and our Company, which we are allowed to omit from this prospectus supplement pursuant to the rules and regulations of the SEC. In addition, we file annual, quarterly and current reports and proxy statements and other information with the SEC. Our SEC filings are available on the SEC's website at www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at ir.akoustis.com/sec-filings. We have not incorporated by reference into this prospectus supplement the information on our website and it is not a part of this document.

S-22



# AKOUSTIS TECHNOLOGIES, INC. AKOUSTIS, INC.

## **Prospectus**

\$150,000,000

Common Stock Preferred Stock Debt Securities Warrants Rights Units

This prospectus relates to common stock, preferred stock, debt securities, warrants, rights and units that Akoustis Technologies, Inc. may sell from time to time in one or more offerings on terms to be determined at the time of sale. Our subsidiary, Akoustis, Inc., may guarantee any debt securities offered by this prospectus, if and to the extent identified in the related prospectus supplement. We refer to the common stock, preferred stock, debt securities and any related guarantees, warrants, rights and units collectively as the "securities." We will provide specific terms of these securities in supplements to this prospectus. You should read this prospectus and any supplement carefully before you invest. This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement for those securities.

These securities may be sold directly by us, through dealers or agents designated from time to time, to or through underwriters or through a combination of these methods. See "Plan of Distribution" in this prospectus. We may also describe the plan of distribution for any particular offering of these securities in any applicable prospectus

supplement. If any agents, underwriters or dealers are involved in the sale of any securities in respect of which this prospectus is being delivered, we will disclose their names and the nature of our arrangements with them in a prospectus supplement. The net proceeds we expect to receive from any such sale will also be included in a prospectus supplement.

Our common stock trades on the Nasdaq Capital Market under the symbol "AKTS." On February 3, 2022, the last reported sale price for our common stock was \$5.56 per share.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND UNDER SIMILAR HEADINGS IN OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS OR ANY SUCH PROSPECTUS SUPPLEMENT. SEE "RISK FACTORS" ON PAGE S-7 OF THIS PROSPECTUS.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus.

Any representation to the contrary is a criminal offense.

The date of this prospectus is February 15, 2022.

#### **Table of Contents**

	Page
ABOUT THIS PROSPECTUS	1
FORWARD-LOOKING STATEMENTS	1
THE COMPANY	2
RISK FACTORS	2
<u>USE OF PROCEEDS</u>	2
DESCRIPTION OF COMMON STOCK WE MAY OFFER	3
DESCRIPTION OF PREFERRED STOCK WE MAY OFFER	3
DESCRIPTION OF DEBT SECURITIES AND GUARANTEES WE MAY OFFER	6
DESCRIPTION OF WARRANTS WE MAY OFFER	14
DESCRIPTION OF UNITS WE MAY OFFER	15
DESCRIPTION OF RIGHTS WE MAY OFFER	16
CERTAIN PROVISIONS OF DELAWARE LAW AND OF THE COMPANY'S CERTIFICATE OF INCORPORATION AND BYLAWS	17
PLAN OF DISTRIBUTION	18
<u>LEGAL MATTERS</u>	20
<u>EXPERTS</u>	20
WHERE YOU CAN FIND MORE INFORMATION	20
	20
INCORPORATION BY REFERENCE	20

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf process, we may from time to time sell any combination of securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities under this shelf registration process, we will provide a prospectus supplement that will contain specific information about the terms of the securities being offered. That prospectus supplement may include a discussion of any risk factors or other special considerations that apply to those securities. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and a prospectus supplement, you should rely on the information in that prospectus supplement. You should read both this prospectus and any applicable prospectus supplement together with additional information described below under the headings "Where You Can Find More Information" and "Incorporation by Reference."

When acquiring any securities discussed in this prospectus, you should rely on the information provided in this prospectus, the prospectus supplement and any free writing prospectus we may authorize for use in connection with such offering, including the information incorporated by reference. Neither we, nor any underwriters or agents, have authorized anyone to provide you with different information. We are not offering the securities in any state where such an offer is prohibited. You should not assume that the information in this prospectus, any prospectus supplement, any free writing prospectus we may authorize for use in connection with such offering, or any document incorporated by reference, is truthful or complete at any date other than the date mentioned on the cover page of those documents. You should also carefully review the section

entitled "Risk Factors", which highlights certain risks associated with an investment in our securities, to determine whether an investment in our securities is appropriate for you.

Unless otherwise stated or the context requires otherwise, references to "Akoustis", the "Company," "we," "us" or "our" are to Akoustis Technologies, Inc. and its wholly owned consolidated subsidiary, Akoustis, Inc., each a Delaware corporation.

## FORWARD-LOOKING STATEMENTS

Certain information set forth in this prospectus or incorporated by reference in this prospectus may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are intended to be covered by the "safe harbor" created by those sections. Forward-looking statements include information concerning our possible future results of operations, business strategies, competitive position, potential growth opportunities, potential market opportunities and the effects of competition. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "forecasts," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would" or similar expressions and the negatives of those terms.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. We discuss these risks in greater detail in the "Risk Factors" section and elsewhere in this prospectus. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this prospectus. You should read this prospectus and the documents that we have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

1

#### THE COMPANY

Akoustis® is an emerging commercial product company focused on developing, designing, and manufacturing innovative RF filter solutions for the wireless industry, including for products such as smartphones and tablets, network infrastructure equipment, WiFi Customer Premise Equipment ("CPE") and defense applications. Filters are critical in selecting and rejecting signals, and their performance enables differentiation in the modules defining the RF front-end ("RFFE"). 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. We have developed a proprietary microelectromechanical system ("MEMS") based bulk acoustic wave ("BAW") technology and a unique manufacturing process flow, called "XBAW<sup>TM</sup>", for our filters produced for use in RFFE modules. Our XBAW filters incorporate optimized high purity piezoelectric materials for high power, high frequency and wide bandwidth operation. We are developing RF filters for 5G, WiFi and defense bands using our proprietary resonator device models and product design kits (PDKs). As we qualify our RF filter products, we are engaging with target customers to evaluate our filter solutions. Our initial designs target UHB, sub 7 GHz 5G, WiFi and defense bands. We expect our filter solutions will address problems (such as loss, bandwidth, power handling, and isolation) created by the growing number of frequency bands in the RFFE of mobile devices, infrastructure and premise equipment to support 5G, and WiFi. We have prototyped, sampled and shipped commercial production volume of our single-band low loss BAW filter designs for 5G frequency bands and 5 GHz and 6 GHz WiFi bands which are suited to competitive BAW solutions and historically cannot be addressed with low-band, lower power handling surface acoustic wave ("SAW") technology. We currently manufacture our high-performance RF filter circuits, using our first generation XBAW wafer process, in

## **Company Information**

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

## RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risk factors described in our Annual Report on Form 10-K for our most recent fiscal year (together with any material changes thereto contained in subsequent filed Quarterly Reports on Form 10-Q and Current Reports on Form 8-K) and those contained in our other filings with the SEC, which are incorporated by reference in this prospectus and any accompanying prospectus supplement.

The prospectus supplement applicable to each type or series of securities we offer may contain a discussion of risks applicable to the particular types of securities that we are offering under that prospectus supplement. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the caption "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained in the prospectus supplement or appearing or incorporated by reference in this prospectus. These risks could materially affect our business, results of operations or financial condition and cause the value of our securities to decline. You could lose all or part of your investment.

## USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, the net proceeds from the sale of the securities will be used for working capital and general corporate purposes, which may include acquisitions, retirement of debt and other business opportunities.

2

## DESCRIPTION OF COMMON STOCK WE MAY OFFER

The following summary description of our common stock is based on the provisions of our certificate of incorporation, as amended (the "Certificate of Incorporation"), and bylaws, as amended (the "Bylaws"), and the applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL"). This information may not be complete in all respects and is qualified entirely by reference to the provisions of our Certificate of Incorporation and our Bylaws and the DGCL. For information on how to obtain copies of our Certificate of Incorporation and Bylaws, see the discussion below under the heading "Where You Can Find More Information."

#### **Authorized Capital**

We currently have authority to issue 100,000,000 shares of our common stock, par value of \$0.001 per share. As of January 20, 2022, 54,672,366 shares of our common stock were issued and outstanding.

#### **Voting Powers**

At every annual or special meeting of stockholders, every holder of common stock is entitled to one vote per share. There is no cumulative voting in the election of directors.

## **Dividend and Liquidation Rights**

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 Company's board of directors (the "Board of Directors") from time to time may determine. We have never paid any cash dividends on our common 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 dividends will be at the discretion of the 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.

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.

Our shares of common stock are listed on the Nasdag Capital Market under the symbol "AKTS."

#### DESCRIPTION OF PREFERRED STOCK WE MAY OFFER

This section describes the general terms and provisions of the preferred stock we may offer. This information may not be complete in all respects and is qualified entirely by reference to the Certificate of Incorporation or certificate of designations with respect to each series of preferred stock. The specific terms of any series will be described in a prospectus supplement. Those terms may differ from the terms discussed below. Any series of preferred stock we issue will be governed by the Certificate of Incorporation and by the certificate of designations relating to that series. We will file the certificate of designations with the SEC and incorporate it by reference as an exhibit to our registration statement at or before the time we issue any preferred stock of that series.

#### **Authorized Preferred Stock**

The Certificate of Incorporation authorizes us to issue 5,000,000 shares of preferred stock, par value \$0.001 per share. As of January 20, 2022, we had no shares of preferred stock issued and outstanding. Our authorized but unissued shares of preferred stock are available for issuance without further action by our stockholders, unless such action is required by applicable law or the rules of any stock exchange or automated quotation system on which our securities may be listed or traded.

3

The Board of Directors has the authority to issue preferred stock in one or more series, each of which will have such distinctive designation or title as shall be determined by the 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 designations, powers, rights and preferences of the preferred stock could include voting powers, dividend rights, dissolution rights, conversion rights, redemption rights, liquidation preferences, and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action. No shares of our preferred stock are currently issued and outstanding.

## Specific Terms of a Series of Preferred Stock

The preferred stock we may offer will be issued in one or more series. A prospectus supplement will discuss the following features of the series of preferred stock to which it relates:

- the designations and stated value per share;
- the number of shares offered;
- the amount of liquidation preference per share;
- the public offering price at which the preferred stock will be issued;
- the dividend rate, the method of its calculation, the dates on which dividends would be paid and the dates, if any, from which dividends would cumulate;
- any redemption or sinking fund provisions;
- any conversion or exchange rights; and
- any additional voting, dividend, liquidation, redemption, sinking fund and other rights, preferences, privileges, limitations and restrictions.

## Rank

Unless otherwise stated in the prospectus supplement, the preferred stock will have priority over our common stock with respect to dividends and distribution of assets, but will rank junior to all our outstanding indebtedness for borrowed money. Any series of preferred stock must rank senior to our common stock upon the payment of dividends or upon dissolution but could rank senior, equal or junior to any other series of preferred stock, as may be specified in a prospectus supplement, as long as our certificate of incorporation so permits.

## Dividends

To the extent provided for in the certificate of designation creating such series of preferred stock, holders of each series of preferred stock shall be entitled to receive cash dividends to the extent specified in the prospectus supplement when, as and if declared by the Board of Directors, from funds legally available for the payment of

dividends. The rates and dates of payment of dividends of each series of preferred stock will be stated in the prospectus supplement. Dividends will be payable to the holders of record of preferred stock as they appear on our books on the record dates fixed by the Board of Directors. Dividends on any series of preferred stock may be cumulative or non-cumulative, as discussed in the applicable prospectus supplement.

4

#### Convertibility

Shares of a series of preferred stock may be exchangeable or convertible into shares of our common stock, another series of preferred stock or other securities or property. The conversion or exchange may be mandatory or optional. The prospectus supplement will specify whether the preferred stock being offered has any conversion or exchange features, and will describe all the related terms and conditions.

#### Redemption

The terms, if any, on which shares of preferred stock of a series may be redeemed will be discussed in the applicable prospectus supplement and set forth in our Certificate of Incorporation or in any certificate of designation creating such series.

## Liquidation

Upon any voluntary or involuntary liquidation, dissolution or winding up of the affairs of Akoustis, holders of each series of preferred stock will be entitled to receive distributions upon liquidation in the amount described in the related prospectus supplement and set forth in our Certificate of Incorporation or in any certificate of designation creating such series. These distributions will be made before any distribution is made on any securities ranking junior to the preferred stock with respect to liquidation, including our common stock. If the liquidation amounts payable relating to the preferred stock of any series and any other securities ranking on a parity regarding liquidation rights are not paid in full, the holders of the preferred stock of that series will share ratably in proportion to the full liquidation preferences of each security. If the liquidation amounts payable are insufficient to pay any distribution to the preferred stock of any series and any other securities ranking on a parity regarding liquidation rights, the holders of the preferred stock of that series will receive nothing. Holders of our preferred stock will not be entitled to any other amounts from us after they have received their full liquidation preference.

#### Voting

The holders of preferred stock of each series will have no voting powers, except as required by law or set forth in our Certificate of Incorporation or in any certificate of designation creating such series and as described below or in a prospectus supplement. Our Board of Directors may, upon issuance of a series of preferred stock, grant voting powers to the holders of that series to vote generally in the election of directors and otherwise to vote together with the holders of common stock or to vote separately as class on specified matters, such as the election of additional board members if we fail to pay dividends in a timely fashion.

Without the affirmative vote of a majority of the shares of preferred stock then outstanding, we may not:

- increase or decrease the aggregate number of authorized shares of the class;
- increase or decrease the par value of the shares of the class; or
- alter or change the powers, preferences or special rights of the shares of the class so as to affect them adversely.

## No Other Rights

The shares of a series of preferred stock will not have any preferences, voting powers or relative, participating, optional or other special rights except:

- as discussed above or in the prospectus supplement;
- as provided in our Certificate of Incorporation or in any certificate of designation; and
- as otherwise required by law.

5

## DESCRIPTION OF DEBT SECURITIES AND GUARANTEES WE MAY OFFER

#### General

The debt securities that we may issue will constitute debentures, notes, bonds or other evidences of indebtedness of Akoustis Technologies, Inc., to be issued in one or more series, which may include either senior debt securities, subordinated debt securities or senior subordinated debt securities. The particular terms of any series of debt securities we offer, including the extent to which the general terms set forth below may be applicable to a particular series, will be described in a prospectus supplement relating to such series.

Debt securities and any guarantees that we may issue will be issued under an indenture between us and a trustee qualified to act as such under the Trust Indenture Act of 1939. We have filed the form of the indenture as an exhibit to the registration statement of which this prospectus is a part. When we refer to the "indenture" in this prospectus, we are referring to the indenture under which the debt securities are issued as supplemented by any supplemental indenture applicable to the debt securities. We will provide the name of the trustee in any prospectus supplement related to the issuance of debt securities, and we will also provide certain other information related to the trustee, including describing any relationship we have with the trustee, in such prospectus supplement.

THE FOLLOWING DESCRIPTION IS A SUMMARY OF THE MATERIAL PROVISIONS OF THE INDENTURE. IT DOES NOT RESTATE THE INDENTURE IN ITS ENTIRETY. THE INDENTURE IS GOVERNED BY THE TRUST INDENTURE ACT OF 1939. THE TERMS OF THE DEBT SECURITIES INCLUDE THOSE STATED IN THE INDENTURE AND THOSE MADE PART OF THE INDENTURE BY REFERENCE TO THE TRUST INDENTURE ACT. WE URGE YOU TO READ THE INDENTURE BECAUSE IT, AND NOT THIS DESCRIPTION, DEFINES YOUR RIGHTS AS A HOLDER OF THE DEBT SECURITIES.

## Information You Will Find in the Prospectus Supplement

The indenture provides that we may issue debt securities from time to time in one or more series and that we may denominate the debt securities and make them payable in foreign currencies. The indenture does not limit the aggregate principal amount of debt securities that can be issued thereunder. The prospectus supplement for a

series of debt securities will provide information relating to the terms of the series of debt securities being offered, which may include:

- the title and denominations of the debt securities of the series;
- any limit on the aggregate principal amount of the debt securities of the series;
- the date or dates on which the principal and premium, if any, with respect to the debt securities of the series are payable or the method of determination thereof;
- the rate or rates, which may be fixed or variable, at which the debt securities of the series shall bear interest, if any, or the method of calculating and/or resetting such rate or rates of interest;
- the dates from which such interest shall accrue or the method by which such dates shall be determined and the duration of the extensions and the basis upon which interest shall be calculated;
- the interest payment dates for the series of debt securities or the method by which such dates will be determined, the terms of any deferral of interest and any right of ours to extend the interest payment periods;
- the place or places where the principal and interest on the series of debt securities will be payable;
- the terms and conditions upon which debt securities of the series may be redeemed, in whole or in part, at our option or otherwise;
- our obligation, if any, to redeem, purchase, or repay debt securities of the series pursuant to any sinking fund or other specified event or at the option of the holders and the terms of any such redemption, purchase, or repayment;

6

- the terms, if any, upon which the debt securities of the series may be convertible into or exchanged for other securities, including, among other things, the initial
  conversion or exchange price or rate and the conversion or exchange period;
- if the amount of principal, premium, if any, or interest with respect to the debt securities of the series may be determined with reference to an index or formula, the manner in which such amounts will be determined;
- if any payments on the debt securities of the series are to be made in a currency or currencies (or by reference to an index or formula) other than that in which such securities are denominated or designated to be payable, the currency or currencies (or index or formula) in which such payments are to be made and the terms and conditions of such payments;
- any changes or additions to the provisions of the indenture dealing with defeasance, including any additional covenants that may be subject to our covenant defeasance option;
- the currency or currencies in which payment of the principal and premium, if any, and interest with respect to debt securities of the series will be payable, or in which the debt securities of the series shall be denominated, and the particular provisions applicable thereto in accordance with the indenture;
- the portion of the principal amount of debt securities of the series which will be payable upon declaration of acceleration or provable in bankruptcy or the method by which such portion or amount shall be determined;
- whether the debt securities of the series will be secured or guaranteed and, if so, on what terms;
- any addition to or change in the events of default with respect to the debt securities of the series;
- the identity of any trustees, authenticating or paying agents, transfer agents or registrars;
- the applicability of, and any addition to or change in, the covenants currently set forth in the indenture;
- the subordination, ranking or priority, if any, of the debt securities of the series and terms of the subordination; and
- any other terms of the debt securities of the series which are not prohibited by the indenture.

Holders of debt securities may present debt securities for exchange in the manner, at the places, and subject to the restrictions set forth in the debt securities, the indenture, and the prospectus supplement. We will provide these services without charge, other than any tax or other governmental charge payable in connection therewith, but subject to the limitations provided in the indenture, any board resolution establishing such debt securities and any applicable indenture supplement.

#### Senior Debt

We may issue senior debt securities under the indenture. Unless otherwise set forth in the applicable indenture supplement and described in a prospectus supplement, the senior debt securities will be senior unsecured obligations, ranking equally with all of our existing and future senior unsecured debt. The senior debt securities will be senior to all of our subordinated debt and junior to any secured debt we may incur as to the assets securing such debt.

## Subordinated Debt

We may issue subordinated debt securities under the indenture. These subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner set forth in the indenture and any applicable indenture supplement, to all of our senior indebtedness.

If this prospectus is being delivered in connection with a series of subordinated debt securities, the accompanying prospectus supplement or the information incorporated by reference will set forth the approximate amount of senior indebtedness outstanding as of the end of the most recent fiscal quarter.

We may issue senior subordinated debt securities under the indenture. These senior subordinated debt securities will be, to the extent and in the manner set forth in the applicable indenture supplement, subordinate and junior in right of payment to all of our "senior indebtedness" and senior to our other subordinated debt.

#### Guarantees

Our payment obligations under any series of the debt securities may be unconditionally guaranteed by our subsidiary, Akoustis, Inc. If a series of debt securities is so guaranteed, Akoustis, Inc. will execute a supplemental indenture as evidence of the guarantee. The applicable prospectus supplement will describe the terms of any guarantee by Akoustis, Inc.

#### **Interest Rate**

Debt securities that bear interest will do so at a fixed rate or a variable rate. We may sell, at a discount below the stated principal amount, any debt securities which bear no interest or which bear interest at a rate that at the time of issuance is below the prevailing market rate. The relevant prospectus supplement will describe the special United States federal income tax considerations applicable to:

- any discounted debt securities; and
- any debt securities issued at par which are treated as having been issued at a discount for United States federal income tax purposes.

#### **Registered Global Securities**

We may issue registered debt securities of a series in the form of one or more fully registered global securities. We will deposit the registered global security with a depository or with a nominee for a depository identified in the prospectus supplement relating to such series. The global security or global securities will represent and will be in a denomination or aggregate denominations equal to the portion of the aggregate principal amount of outstanding registered debt securities of the series to be represented by the registered global security or securities. Unless it is exchanged in whole or in part for debt securities in definitive registered form, a registered global security may not be transferred, except as a whole in three cases:

- by the depository for the registered global security to a nominee of the depository;
- by a nominee of the depository to the depository or another nominee of the depository; and
- by the depository or any nominee to a successor of the depository or a nominee of the successor.

The prospectus supplement relating to a series of debt securities will describe the specific terms of the depository arrangement concerning any portion of that series of debt securities to be represented by a registered global security. We anticipate that the following provisions will generally apply to all depository arrangements.

Upon the issuance of a registered global security, the depository will credit, on its book-entry registration and transfer system, the principal amounts of the debt securities represented by the registered global security to the accounts of persons that have accounts with the depository. These persons are referred to as "participants." Any underwriters, agents or dealers participating in the distribution of debt securities represented by the registered global security will designate the accounts to be credited. Only participants or persons that hold interests through participants will be able to beneficially own interests in a registered global security. The depository for a global security will maintain records of beneficial ownership interests in a registered global security for participants. Participants or persons that hold through participants will maintain records of beneficial ownership interests in a global security for persons other than participants. These records will be the only means to transfer beneficial ownership in a registered global security.

8

The laws of some states may require that specified purchasers of securities take physical delivery of the securities in definitive form. These laws may limit the ability of those persons to own, transfer or pledge beneficial interests in global securities.

So long as the depository, or its nominee, is the registered owner of a registered global security, the depository or its nominee will be considered the sole owner or holder of the debt securities represented by the registered global security for all purposes under the indenture. Except as set forth below, owners of beneficial interests in a registered global security:

- may not have the debt securities represented by a registered global security registered in their names;
- will not receive or be entitled to receive physical delivery of debt securities represented by a registered global security in definitive form; and
- will not be considered the owners or holders of debt securities represented by a registered global security under the indenture.

Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depository for the registered global security and, if the person is not a participant, on the procedures of the participant through which the person owns its interests, to exercise any rights of a holder under the indenture applicable to the registered global security.

We understand that, under existing industry practices, if we request any action of holders, or if an owner of a beneficial interest in a registered global security desires to give or take any action which a holder is entitled to give or take under the indenture, the depository for the registered global security would authorize the participants holding the relevant beneficial interests to give or take the action, and the participants would authorize beneficial owners owning through the participants to give or take the action or would otherwise act upon the instructions of beneficial owners holding through them.

## Payment of Interest on and Principal of Registered Global Securities

We will make principal, premium, if any, and interest payments on debt securities represented by a registered global security registered in the name of a depository or its nominee to the depository or its nominee as the registered owner of the registered global security. None of Akoustis, the trustee, or any paying agent for debt securities represented by a registered global security will have any responsibility or liability for:

- any aspect of the records relating to, or payments made on account of, beneficial ownership interests in such registered global security;
- maintaining, supervising, or reviewing any records relating to beneficial ownership interests;
- the payments to beneficial owners of the global security of amounts paid to the depository or its nominee; or
- any other matter relating to the actions and practices of the depository, its nominee or any of its participants.

We expect that the depository, upon receipt of any payment of principal, premium or interest in respect of the global security, will immediately credit participants' accounts with payments in amounts proportionate to their beneficial interests in the principal amount of a registered global security as shown on the depository's records. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing instructions and customary practices. This is currently the case with the securities held for the accounts of customers registered in "street name." Such payments will be the responsibility of participants.

Q

#### **Exchange of Registered Global Securities**

We may issue debt securities in definitive form in exchange for the registered global security if both of the following occur:

- the depository for any debt securities represented by a registered global security is at any time unwilling or unable to continue as depository or ceases to be a clearing agency registered under the Exchange Act; and
- we do not appoint a successor depository within 90 days.

In addition, we may, at any time, determine not to have any of the debt securities of a series represented by one or more registered global securities. In this event, we will issue debt securities of that series in definitive form in exchange for all of the registered global security or securities representing those debt securities.

#### Covenants by Akoustis

The indenture includes covenants by us, including among other things that we will make all payments of principal and interest at the times and places required. The supplemental indenture establishing each series of debt securities may contain additional covenants, including covenants which could restrict our right to incur additional indebtedness or liens and to take certain actions with respect to our businesses and assets.

#### **Events of Default**

Unless otherwise indicated in the applicable prospectus supplement, the following will be events of default under the indenture with respect to each series of debt securities issued under the indenture:

- failure to pay when due any interest on any debt security of that series, continued for 30 days;
- failure to pay when due the principal of, or premium, if any, on, any debt security of that series;
- failure to perform any other covenant or agreement of ours under the indenture or the supplemental indenture with respect to that series or the debt securities of that series, continued for 90 days after written notice to us by the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the series to which the covenant or agreement relates;
- certain events of bankruptcy, insolvency or similar proceedings affecting us; and
- any other event of default specified in any supplemental indenture under which such series of debt securities is issued.

Except as to certain events of bankruptcy, insolvency or similar proceedings affecting us and except as provided in the applicable prospectus supplement, if any event of default shall occur and be continuing with respect to any series of debt securities under the indenture, either the trustee or the holders of at least 25% in aggregate principal amount of outstanding debt securities of such series may accelerate the maturity of all debt securities of such series. Upon certain events of bankruptcy, insolvency or similar proceedings affecting us, the principal, premium, if any, and interest on all debt securities of each series shall be immediately due and payable.

After any such acceleration, but before a judgment or decree based on acceleration has been obtained by the trustee, the holders of a majority in aggregate principal amount of each affected series of debt securities may waive all defaults with respect to such series and rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, have been cured, waived or otherwise remedied.

10

No holder of any debt securities will have any right to institute any proceeding with respect to the indenture or for any remedy under the indenture, unless such holder shall have previously given to the trustee written notice of a continuing event of default and the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the relevant series shall have made written request and offered indemnity satisfactory to the trustee to institute such proceeding as trustee, and the trustee shall not have received from the holders of a majority in aggregate principal amount of the outstanding debt securities of such series a direction inconsistent with such request and shall have failed to institute such proceeding within 60 days. However, such limitations do not apply to a suit instituted by a holder of a debt security for enforcement of payment of the principal of and premium, if any, or interest on such debt security on or after the respective due dates expressed in such debt security.

#### **Supplemental Indentures**

We and the trustee may, at any time and from time to time, without prior notice to or consent of any holders of debt securities, enter into one or more indentures supplemental to the indenture, among other things:

- to add guarantees to or secure any series of debt securities;
- to provide for the succession of another person pursuant to the provisions of the indenture relating to consolidations, mergers and sales of assets and the assumption by such successor of our covenants, agreements, and obligations, or to otherwise comply with the provisions of the indenture relating to consolidations, mergers, and sales of assets;
- to surrender any right or power conferred upon us under the indenture or to add to our covenants further covenants, restrictions, conditions or provisions for the protection of the holders of all or any series of debt securities;
- to cure any ambiguity or to correct or supplement any provision contained in the indenture, in any supplemental indenture or in any debt securities that may be defective or inconsistent with any other provision contained therein;
- to modify or amend the indenture in such a manner as to permit the qualification of the indenture or any supplemental indenture under the Trust Indenture Act;

- to add to or change any of the provisions of the indenture to supplement any of the provisions of the indenture in order to permit the defeasance and discharge of any series of debt securities pursuant to the indenture, so long as any such action does not adversely affect the interests of the holders of debt securities of any series in any material respect;
- to add to, change, or eliminate any of the provisions of the indenture with respect to one or more series of debt securities, so long as any such addition, change or elimination shall not apply to any debt securities of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision;
- to evidence and provide for the acceptance of appointment by a successor or separate trustee; and
- to establish the form or terms of debt securities of any series and to make any change that does not adversely affect the interests of the holders of debt securities

With the consent of the holders of at least a majority in principal amount of debt securities of each series affected by such supplemental indenture (each series voting as one class), we and the trustee may enter into one or more supplemental indentures for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the indenture or modifying in any manner the rights of the holders of debt securities of each such series.

11

Notwithstanding our rights and the rights of the trustee to enter into one or more supplemental indentures with the consent of the holders of debt securities of the affected series as described above, no such supplemental indenture shall, without the consent of the holder of each outstanding debt security of the affected series, among other things:

- change the final maturity of the principal of, or any installment of interest on, any debt securities;
- reduce the principal amount of any debt securities or the rate of interest on any debt securities;
- change the currency in which any debt securities are payable;
- impair the right of the holders to conduct a proceeding for any remedy available to the trustee;
- reduce the percentage in principal amount of any series of debt securities whose holders must consent to an amendment or supplemental indenture;
- modify the ranking or priority of the securities; or
- reduce any premium payable upon the redemption of any debt securities.

## Satisfaction and Discharge of the Indenture; Defeasance

Except to the extent set forth in a supplemental indenture with respect to any series of debt securities, we, at our election, may discharge the indenture and the indenture shall generally cease to be of any further effect with respect to that series of debt securities if (a) we have delivered to the trustee for cancellation all debt securities of that series (with certain limited exceptions) or (b) all debt securities of that series not previously delivered to the trustee for cancellation shall have become due and payable, or are by their terms to become due and payable within one year or are to be called for redemption within one year, and we have deposited with the trustee the entire amount sufficient to pay at maturity or upon redemption all such debt securities.

In addition, we have a "legal defeasance option" (pursuant to which we may terminate, with respect to the debt securities of a particular series, all of our obligations under such debt securities and the indenture with respect to such debt securities) and a "covenant defeasance option" (pursuant to which we may terminate, with respect to the debt securities of a particular series, our obligations with respect to such debt securities under certain specified covenants contained in the indenture). If we exercise our legal defeasance option with respect to a series of debt securities, payment of such debt securities may not be accelerated because of an event of default. If we exercise our covenant defeasance option with respect to a series of debt securities, payment of such debt securities may not be accelerated because of an event of default related to the specified covenants.

We may exercise our legal defeasance option or our covenant defeasance option with respect to the debt securities of a series only if we irrevocably deposit in trust with the trustee cash or U.S. government obligations (as defined in the indenture) for the payment of principal, premium, if any, and interest with respect to such debt securities to maturity or redemption, as the case may be. In addition, to exercise either of our defeasance options, we must comply with certain other conditions, including the delivery to the trustee of an opinion of counsel to the effect that the holders of debt securities of such series will not recognize income, gain or loss for Federal income tax purposes as a result of such defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance had not occurred (and, in the case of legal defeasance only, such opinion of counsel must be based on a ruling from the Internal Revenue Service or other change in applicable Federal income tax law).

The trustee will hold in trust the cash or U.S. government obligations deposited with it as described above and will apply the deposited cash and the proceeds from deposited U.S. government obligations to the payment of principal, premium, if any, and interest with respect to the debt securities of the defeased series.

12

## Mergers, Consolidations and Certain Sales of Assets

We may not:

- consolidate with or merge into any other person or entity or permit any other person or entity to consolidate with or merge into us in a transaction in which we are not the surviving entity, or
- transfer, lease or dispose of all or substantially all of our assets to any other person or entity, unless:
  - the resulting, surviving or transferee entity shall be a corporation organized and existing under the laws of the United States or any state thereof and such resulting, surviving or transferee entity shall expressly assume, by supplemental indenture, executed and delivered in form satisfactory to the trustee, all of our obligations under the debt securities and the indenture;

- immediately after giving effect to such transaction (and treating any indebtedness which becomes an obligation of the resulting, surviving or transferee
  entity as a result of such transaction as having been incurred by such entity at the time of such transaction), no default or event of default would occur or be
  continuing; and
- we shall have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that such consolidation, merger or transfer and such supplemental indenture (if any) comply with the indenture.

The phrase "substantially all" of our assets will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. As a result, there may be a degree of uncertainty in ascertaining whether a sale or transfer of "substantially all" of our assets has occurred.

#### Governing Law

The indenture and the debt securities will be governed by the laws of the State of New York.

## No Personal Liability of Directors, Officers, Employees and Stockholders

No director, officer, incorporator or stockholder of Akoustis, as such, shall have any liability for any obligations of Akoustis under the debt securities or the indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation, solely by reason of his, her, or its status as director, officer, incorporator or stockholder of Akoustis. By accepting a debt security, each holder waives and releases all such liability, but only such liability. The waiver and release are part of the consideration for issuance of the debt securities. Nevertheless, such waiver may not be effective to waive liabilities under the federal securities laws and it has been the view of the SEC that such a waiver is against public policy.

#### Conversion or Exchange Rights

Any debt securities offered hereby may be convertible into or exchangeable for shares of our equity or other securities. The terms and conditions of such conversion or exchange will be set forth in the applicable prospectus supplement. Such terms may include, among others, the following:

- the conversion or exchange price;
- the conversion or exchange period;
- provisions regarding our ability or that of the holder to convert or exchange the debt securities;
- events requiring adjustment to the conversion or exchange price; and
- provisions affecting conversion or exchange in the event of our redemption of such debt securities.

13

## Concerning the Trustee

The indenture provides that there may be more than one trustee with respect to one or more series of debt securities. If there are different trustees for different series of debt securities, each trustee will be a trustee of a trust under a supplemental indenture separate and apart from the trust administered by any other trustee under such indenture. Except as otherwise indicated in this prospectus or any prospectus supplement, any action permitted to be taken by a trustee may be taken by the trustee only with respect to the one or more series of debt securities for which it is the trustee under an indenture. Any trustee under the indenture or a supplemental indenture may resign or be removed with respect to one or more series of debt securities. All payments of principal of, premium, if any, and interest on, and all registration, transfer, exchange authentication and delivery (including authentication and delivery on original issuance of the debt securities) of, the debt securities of a series will be effected by the trustee with respect to such series at an office designated by the trustee.

The indenture contains limitations on the right of the trustee, should it become a creditor of Akoustis, to obtain payment of claims in certain cases or to realize on certain property received in respect of any such claim as security or otherwise. If the trustee acquires an interest that conflicts with any duties with respect to the debt securities, the trustee is required to either resign or eliminate such conflicting interest to the extent and in the manner provided by the indenture.

## DESCRIPTION OF WARRANTS WE MAY OFFER

We may issue warrants for the purchase of debt securities, preferred stock or common stock. Warrants may be issued independently or together with debt securities, preferred stock or common stock and may be attached to or separate from any offered securities. Any issue of warrants will be governed by the terms of the applicable form of warrant and any related warrant agreement which we will file with the SEC and they will be incorporated by reference to the registration statement of which this prospectus is a part on or before the time we issue any warrants.

The particular terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the title of such warrants;
- the aggregate number of such warrants;
- the price or prices at which such warrants will be issued;
- the currency or currencies (including composite currencies) in which the price of such warrants may be payable;
- the terms of the securities purchasable upon exercise of such warrants and the procedures and conditions relating to the exercise of such warrants;
- the price at which the securities purchasable upon exercise of such warrants may be purchased;
- the date on which the right to exercise such warrants will commence and the date on which such right shall expire;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- if applicable, the minimum or maximum amount of such warrants that may be exercised at any one time;
- if applicable, the designation and terms of the securities with which such warrants are issued and the number of such warrants issued with each such security;

- if applicable, the date on and after which such warrants and the related securities will be separately transferable;
- information with respect to book-entry procedures, if any; and
- any other terms of such warrants, including terms, procedures and limitations relating to the exchange or exercise of such warrants.

14

The prospectus supplement relating to any warrants to purchase equity securities may also include, if applicable, a discussion of certain U.S. federal income tax and ERISA considerations.

Warrants for the purchase of preferred stock and common stock will be offered and exercisable for U.S. dollars only. Each warrant will entitle its holder to purchase the principal amount of debt securities or the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement.

After the close of business on the expiration date, unexercised warrants will become void. We will specify the place or places where, and the manner in which, warrants may be exercised in the applicable prospectus supplement.

Prior to the exercise of any warrants to purchase debt securities, preferred stock or common stock, holders of the warrants will not have any of the rights of holders of the debt securities, preferred stock or common stock purchasable upon exercise.

As of January 20, 2022, warrants to purchase a total of 81,580 shares of our common stock at a weighted average exercise price of \$7.98 per share were outstanding. Warrants to purchase a total of 3,025 shares of common stock expire in February 2022 and have an exercise price of \$5.00 per share. Warrants to purchase a total of 37,452 shares of common stock expire in May 2022 and have an exercise price of \$9.00 per share. Warrants to purchase (i) a total of 13,678 shares of common stock at an exercise price of \$5.50 per share and (ii) a total of 27,425 shares of common stock at an exercise price of \$8.16 per share expire in June 2023.

## DESCRIPTION OF UNITS WE MAY OFFER

We may issue units composed of any combination of our debt securities, common stock, preferred stock, warrants, and rights. We will issue each unit so that the holder of the unit is also the holder of each security included in the unit. As a result, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The following description is a summary of selected provisions relating to units that we may offer. The summary is not complete. When units are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the units as described in a prospectus supplement or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

The specific terms of any units offered will be set forth in a unit agreement, collateral arrangements and depositary arrangements, if applicable. We will file each of these documents, as applicable, with the SEC and they will be incorporated by reference to the registration statement of which this prospectus is a part on or before the time we issue a series of units. See "Where You Can Find More Information" and "Incorporation by Reference" below for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement or free writing prospectus may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions for the issuance, payment, settlement, transfer, or exchange of the units or of the securities composing the units;
- whether the units will be issued in fully registered or global form; and
- any other terms of the units.

The applicable provisions described in this section, as well as those described under "— Description of Debt Securities and Guarantees We May Offer," "— Description of Common Stock We May Offer," "— Description of Preferred Stock We May Offer" and "— Description of Warrants We May Offer" above, and "— Description of Rights We May Offer" below, will apply to each unit and to each security included in each unit, respectively.

15

## DESCRIPTION OF RIGHTS WE MAY OFFER

We may issue rights to purchase our debt securities, common stock, preferred stock or other securities. These rights may be issued independently or together with any other security offered hereby and may or may not be transferable by the stockholder receiving the rights in such offering. In connection with any offering of such rights, we may enter into a standby arrangement with one or more underwriters or other purchasers pursuant to which the underwriters or other purchasers may be required to purchase any securities remaining unsubscribed for after such offering.

Each series of rights will be issued under a separate rights agreement which we will enter into with a bank or trust company, as rights agent, all which will be set forth in the relevant offering material. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights.

The following description is a summary of selected provisions relating to rights that we may offer. The summary is not complete. When rights are offered in the future, a prospectus supplement, information incorporated by reference or a free writing prospectus, as applicable, will explain the particular terms of those securities and the extent to which these general provisions may apply. The specific terms of the rights as described in a prospectus supplement or free writing prospectus will supplement and, if applicable, may modify or replace the general terms described in this section.

The specific terms of any units offered will be set forth in a rights agreement and the rights certificate, as applicable. We will file each of these documents, as applicable, with the SEC and they will be incorporated by reference to the registration statement of which this prospectus is a part on or before the time we issue a series of

rights. See "Where You Can Find More Information" and "Incorporation by Reference" below for information on how to obtain a copy of a document when it is filed.

The applicable prospectus supplement or free writing prospectus may describe:

- in the case of a distribution of rights to our stockholders, the date of determining the stockholders entitled to the rights distribution;
- in the case of a distribution of rights to our stockholders, the number of rights issued or to be issued to each stockholder;
- the exercise price payable for the underlying debt securities, common stock, preferred stock or other securities upon the exercise of the rights;
- the number and terms of the underlying debt securities, common stock, preferred stock or other securities which may be purchased per each right;
- the extent to which the rights are transferable;
- the date on which the holder's ability to exercise the rights shall commence, and the date on which the rights shall expire;
- the extent to which the rights may include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the material terms of any standby underwriting or purchase arrangement entered into by us in connection with the offering of such rights; and
- any other terms of the rights, including, but not limited to, the terms, procedures, conditions and limitations relating to the exchange and exercise of the rights.

The provisions described in this section, as well as those described under "— Description of Debt Securities and Guarantees We May Offer," "— Description of Common Stock We May Offer" and "— Description of Preferred Stock We May Offer" above, will apply, as applicable, to any rights we offer.

16

# CERTAIN PROVISIONS OF DELAWARE LAW AND OF THE COMPANY'S CERTIFICATE OF INCORPORATION AND BYLAWS

The following paragraphs regarding certain provisions of the DGCL, the Certificate of Incorporation, and the Bylaws are summaries of the material terms thereof and do not purport to be complete. We urge you to read the applicable prospectus supplements, any related free writing prospectuses related to a security that we may offer under this prospectus, the DGCL, and the Certificate of Incorporation and Bylaws. Copies of the Certificate of Incorporation and Bylaws are on file with the SEC as exhibits to filings previously made by us. See "Where You Can Find More Information."

#### General

The provisions of the DGCL, and the Certificate of Incorporation and Bylaws 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

The Bylaws require that special meetings of stockholders be called only by a majority of our entire Board of Directors, by the chairman of the board, the Chief Executive Officer, the President, or the Secretary. In addition, the Bylaws 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 first anniversary of the preceding year's annual meeting, subject to certain exceptions. Such stockholder's notice must set forth certain information required by the Bylaws. 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**

Section 203 of the DGCL generally prohibits a public corporation, which has not opted out of the restrictions contained in such section, 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, the 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 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. Because the Company's voting stock trades on the Nasdaq Capital Market and the Company has not otherwise opted out of Section 203, the restrictions on business combinations with interested stockholders applies to the Company.

## PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus to one or more underwriters or dealers for public offering, through agents, directly to one or more purchasers or through a combination of any such methods of sale. The name of any such underwriters, dealers or agents involved in the offer and sale of the securities, the amounts underwriten and the nature of its obligation to take the securities will be specified in the applicable prospectus supplement. We have reserved the right to sell the securities directly to investors on our own behalf in those jurisdictions where we are authorized to do so. The sale of the securities may be effected in one or more transactions (a) on any national or international securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, (b) in the over-the-counter market, (c) in transactions otherwise than on such exchanges or in the over-the-counter market or (d) through the writing of options. Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

We and our agents and underwriters may offer and sell the securities at a fixed price or prices that may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The securities may be offered on an exchange, which will be disclosed in the applicable prospectus supplement. We may, from time to time, authorize dealers, acting as our agents, to offer and sell the securities upon such terms and conditions as set forth in the applicable prospectus supplement. We may also sell the securities offered by any applicable prospectus supplement in "at-the-market offerings" within the meaning of Rule 415 of the Securities Act of 1933, to or through a market maker or into an existing trading market, on an exchange or otherwise.

If we use underwriters to sell securities, we will enter into an underwriting agreement with them at the time of the sale to them. In connection with the sale of the securities, underwriters or agents may receive compensation from us in the form of underwriting discounts or commissions and may also receive commissions from purchasers of the securities for whom they may act as agent. The names of any underwriters, any underwriting compensation paid by us to underwriters or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers, will be set forth in the applicable prospectus supplement to the extent required by applicable law. Underwriters may sell the securities to or through dealers, and such dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions (which may be changed from time to time) from the purchasers for whom they may act as agents. If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

18

Dealers and agents participating in the distribution of the securities may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. Unless otherwise indicated in the applicable prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase debt securities as a principal, and may then resell the debt securities at varying prices to be determined by the dealer.

If so indicated in the prospectus supplement, we will authorize underwriters, dealers or agents to solicit offers by certain specified institutions to purchase offered securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. Such contracts will be subject to any conditions set forth in the applicable prospectus supplement and the prospectus supplement will set forth the commission payable for solicitation of such contracts. The underwriters and other persons soliciting such contracts will have no responsibility for the validity or performance of any such contracts. Offers to purchase the securities being offered by this prospectus may also be solicited directly.

Underwriters, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution towards certain civil liabilities, including any liabilities under the Securities Act.

To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain, or otherwise affect the price of the securities. These may include over-allotment, stabilization, syndicate short covering transactions and penalty bids. Over-allotment involves sales in excess of the offering size, which creates a short position. Stabilizing transactions involve bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate short covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim selling concessions from dealers when the securities originally sold by the dealers are purchased in covering transactions to cover syndicate short positions. These transactions may cause the price of the securities sold in an offering to be higher than it would otherwise be. These transactions, if commenced, may be discontinued by the underwriters at any time.

Any securities other than our common stock issued hereunder may be new issues of securities with no established trading market. Any underwriters or agents to or through whom such securities are sold for public offering and sale may make a market in such securities, but such underwriters or agents will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of the trading market for any such securities. The amount of expenses expected to be incurred by us in connection with any issuance of securities will be set forth in the applicable prospectus supplement. Certain of the underwriters, dealers or agents and their associates may engage in transactions with, and perform services for, us and certain of our affiliates in the ordinary course of business.

During such time as we may be engaged in a distribution of the securities covered by this prospectus we are required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes us, any affiliated purchasers, and any broker-dealer or other person who participates in such distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase, any security which is the subject of the distribution until the entire distribution is complete. Regulation M also restricts bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of our shares of common stock.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

19

## LEGAL MATTERS

The validity and legality of the securities offered hereby and certain other legal matters will be passed upon for us by K&L Gates LLP, Charlotte, North Carolina.

## **EXPERTS**

The consolidated financial statements of Akoustis Technologies, Inc. and its wholly-owned subsidiary included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2021 have been audited by Marcum LLP, an independent registered public accounting firm, as stated in its report which is incorporated by reference herein, and has been so incorporated in reliance upon such report and upon the authority of such firm as experts in accounting and auditing.

#### WHERE YOU CAN FIND MORE INFORMATION

We file annual reports, quarterly reports, current reports, proxy statements and other information with the SEC under the Exchange Act. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our web site is located at www.akoustis.com. The information contained on, or that may be obtained from, our website is not, and shall not be deemed to be, a part of this prospectus.

We will provide, upon written or oral request, without charge to you, including any beneficial owner to whom this prospectus is delivered, a copy of any or all of the documents incorporated herein by reference other than the exhibits to those documents, unless the exhibits are specifically incorporated by reference into the information that this prospectus incorporates. You should direct a request for copies to Akoustis Technologies, Inc., 9805 Northcross Center Court, Suite A, Huntersville, North Carolina 28078; Telephone: (704) 997-5735.

#### INCORPORATION BY REFERENCE

The SEC permits us to "incorporate by reference" the information and reports we file with it. This means that we can disclose important information to you by referring to another document. The information that we incorporate by reference is considered to be part of this prospectus, and later information that we file with the SEC automatically updates and supersedes this information. We incorporate by reference the documents listed below, except to the extent information in those documents is different from the information contained in this prospectus, and all future documents filed with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until we terminate the offering of these securities:

- Our Annual Report on Form 10-K for the fiscal year ended June 30, 2021, which was filed on August 30, 2021 (the "Form 10-K");
- Our Quarterly Reports on Form 10-Q for the quarterly period ended September 30, 2021, which was filed on November 1, 2021, and for the quarterly period ended December 31, 2021, which was filed on January 31, 2022;
- Our Current Reports on Form 8-K filed on October 18, 2021 and November 1, 2021;
- The information specifically incorporated by reference into the Form 10-K from our definitive proxy statement on <u>Schedule 14A</u> (other than information furnished rather than filed), filed with the SEC on September 17, 2021; and
- The description of our common stock contained in our Registration Statement on Form 8-A (File No. 001-38029) filed with the SEC on March 10, 2017, including any amendment or report filed for the purpose of updating such description, and the description of our common stock contained in Exhibit 4.8 to the Form 10-K.

20

We also incorporate by reference any future filings made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made on or after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to:

Akoustis Technologies, Inc. 9805 Northcross Center Court, Suite A Huntersville, North Carolina 28078 Attention: Corporate Secretary Telephone: (704) 997-5735

Copies of the above reports may also be accessed from our website at ir.akoustis.com/sec-filings. We have authorized no one to provide you with any information that differs from that contained in this prospectus. Accordingly, you should not rely on any information that is not contained or incorporated by reference in this prospectus. You should not assume that the information in this prospectus is accurate as of any date other than the date of the front cover of this prospectus.

21



AKOUSTIS TECHNOLOGIES, INC.

SHARES

PROSPECTUS SUPPLEMENT January , 2024