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# Akoustis Receives WiFi 6E Design Win for MU-MIMO Gateway

- 5.5 GHz and 6.5 GHz XBAW Coexistence Filter Solutions for Carrier-Grade OEM
- Production Ramp Expected to Begin in Q4 Calendar 2021

**Charlotte, N.C., Aug. 25, 2021 (GLOBE NEWSWIRE)** -- Akoustis Technologies, Inc. (NASDAQ: AKTS) (“Akoustis” or the “Company”), an integrated device manufacturer (IDM) of patented bulk acoustic wave (BAW) high-band RF filters for mobile and other wireless applications, announced today that its patented XBAW<sup>®</sup> filters are being designed into a new WiFi 6E gateway platform by a carrier-grade WiFi OEM.

The new gateway design will use multiple Akoustis 5.5 GHz and 6.5 GHz XBAW<sup>®</sup> coexistence filters for a tri-band multi-user, multiple-in-multiple-out (MU-MIMO) gateway product that will be part of carrier installed consumer premise equipment. The 5.5 GHz filter module covers the UNII 1-3 spectrum of the WiFi 6E standard, while the 6.5 GHz filter module covers the entire UNII 5-8 spectrum. The Company expects the customer to enter production of the new gateway in late calendar 2021, with production to ramp in early 2022.

Dave Aichele, EVP of Business Development of Akoustis, stated, “We continue to add new WiFi 6E customers as our industry leading 5.5/6.5 GHz and 5.6/6.6 GHz coexistence filter solutions offer greater selectivity and greater flexibility in terms of spectrum use.” Mr. Aichele continued, “Given the robust activity in our WiFi 6 and WiFi 6E filter sales pipeline, we expect to receive multiple new design wins in the coming months.”

In April 2020, the FCC announced the approval of 5.9 to 7.1 GHz for unlicensed use, which is the largest spectrum addition since the FCC allocated unlicensed spectrum for WiFi in 1989. The next generation of WiFi that is expected to use these new frequency bands is called WiFi 6E. This approval will create another significant new band, or combination of bands, over the next several years. Since the FCC’s April announcement, governments around the world have begun allocating the same or similar spectrum for future WiFi use. As spectrum is scarce, many nations are limited in the amount of new, available unlicensed spectrum above 6 GHz. This is driving great demand for high-performance coexistence filters that allow the use of all available spectrum.

Akoustis is actively delivering volume production of its WiFi 6 tandem filter solutions, shipping multiple 5G small cell XBAW<sup>®</sup> filter solutions, delivering initial designs of its new 5G mobile filter solutions to multiple customers and is now entering the market with its new WiFi 6E coexistence XBAW<sup>®</sup> filter solutions.

Given the rapidly growing sales funnel activity as well as ongoing interaction with customers regarding expected ramps in both 5G mobile and WiFi 6E in calendar 2022, the Company plans to increase the annual production capacity at its New York fab by the end of calendar

2021 to approximately 500 million filters per year.

Akoustis currently has 15 commercial XBAW filters in its product catalog, and recently introduced [5.6 GHz and 6.6 GHz WiFi 6E](#) coexistence filter modules, which when qualified, will bring the number of catalog products to 17. Current product catalog filters include a [5.6 GHz WiFi filter](#), a [5.2 GHz WiFi filter](#), a [5.5 GHz WiFi-6E filter](#), a [6.5 GHz WiFi 6E filter](#), three [small cell 5G network infrastructure filters](#) including two Band n77 filters and one Band n79 filter, a [3.8 GHz filter](#) and [five S-Band filters](#) for defense phased-array radar applications, a [3.6 GHz filter](#) for the CBRS 5G infrastructure market and a C-Band filter for the [unmanned aircraft systems](#) (UAS) market. The Company is also developing several new filters for the sub-7 GHz bands targeting 5G mobile device, network infrastructure, WiFi CPE and defense markets.

### **About Akoustis Technologies, Inc.**

Akoustis® (<http://www.akoustis.com/>) is a high-tech BAW RF filter solutions company that is pioneering next-generation materials science and MEMS wafer manufacturing to address the market requirements for improved RF filters - targeting higher bandwidth, higher operating frequencies and higher output power compared to incumbent polycrystalline BAW technology deployed today. The Company utilizes its proprietary [XBAW® manufacturing process](#) to produce bulk acoustic wave RF filters for mobile and other wireless markets, which facilitate signal acquisition and accelerate band performance between the antenna and digital back end. Superior performance is driven by the significant advances of high-purity, single-crystal and associated piezoelectric materials and the resonator-filter process technology which drives electro-mechanical coupling and translates to wide filter bandwidth.

Akoustis plans to service the fast growing multi-billion-dollar RF filter market using its integrated device manufacturer (IDM) business model. The Company owns and operates a 120,000 sq. ft. ISO-9001:2015 registered commercial wafer-manufacturing facility located in Canandaigua, NY, which includes a class 100 / class 1000 cleanroom facility - tooled for 150-mm diameter wafers - for the design, development, fabrication and packaging of RF filters, MEMS and other semiconductor devices. Akoustis Technologies, Inc. is headquartered in the Piedmont technology corridor near Charlotte, North Carolina.

### **Forward-Looking Statements**

This document includes “forward-looking statements” within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the “safe harbor” created by those sections. These forward-looking statements include, but are not limited to, statements about our estimates, expectations, beliefs, intentions, plans or strategies for the future (including our possible future results of operations, business strategies, competitive position, potential growth opportunities, potential market opportunities and the effects of competition), and the assumptions underlying such statements. Forward-looking statements include all statements that are not historical facts and typically are identified by use of terms such as “may,” “might,” “would,” “will,” “should,” “could,” “project,” “expect,” “plan,” “strategy,” “anticipate,” “attempt,” “develop,” “help,” “believe,” “think,” “estimate,” “predict,” “intend,” “forecast,” “seek,” “potential,” “possible,” “continue,” “future,” and similar words (including the negative of any of the foregoing), although some forward-looking statements are expressed

differently. Forward-looking statements are neither historical facts nor assurances of future results, performance, events or circumstances. Instead, these forward-looking statements are based on management's current beliefs, expectations and assumptions and are subject to risks and uncertainties. Factors that could cause actual results to differ materially from those currently anticipated include, without limitation, risks relating to our ability to obtain adequate financing and sustain our status as a going concern; our limited operating history; our inability to generate revenues or achieve profitability; the results of our research and development activities; our inability to achieve acceptance of our products in the market; the impact of a pandemic or epidemic or a natural disaster, including the COVID-19 pandemic, on our operations, financial condition and the worldwide economy, including its impact on our ability to access the capital markets; general economic conditions, including upturns and downturns in the industry; shortages in supplies needed to manufacture our products, or needed by our customers to manufacture devices incorporating our products; our limited number of patents; failure to obtain, maintain, and enforce our intellectual property rights; our inability to attract and retain qualified personnel; our reliance on third parties to complete certain processes in connection with the manufacture of our products; product quality and defects; existing or increased competition; our ability to 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 ability to successfully scale our New York wafer fabrication facility and related operations while maintaining quality control and assurance and avoiding delays in output; the rate and degree of market acceptance of any of our products; our ability to achieve design wins from current and future customers; contracting with customers and other parties with greater bargaining power and agreeing to terms and conditions that may adversely affect our business; risks related to doing business in foreign countries, including China; any security breaches, cyber-attacks or other disruptions compromising our proprietary information and exposing us to liability; our failure to innovate or adapt to new or emerging technologies; our failure to comply with regulatory requirements; results of any arbitration or litigation that may arise; stock volatility and illiquidity; dilution caused by any future issuance of common stock or securities that are convertible into or exercisable for common stock; our failure to implement our business plans or strategies; and our ability to maintain effective internal control over financial reporting. These and other risks and uncertainties are described in more detail in the Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of Operations sections of the Company's most recent Annual Report on Form 10-K and in previously filed Quarterly Reports on Form 10-Q. Considering these risks, uncertainties and assumptions, the forward-looking statements regarding future events and circumstances discussed in this document may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements included in this document speak only as of the date hereof and, except as required by law, we undertake no obligation to update publicly or privately any forward-looking statements, whether written or oral, for any reason after the date of this document to conform these statements to new information, actual results or to changes in our expectations.

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