

February 1, 2021



Akoustis Locks Process Flow for First Wafer-Level-Chip-Scale Package (WLCSP) for XBAW Filters

– New Packaging Solution Addresses Small Form Factor Requirements for 5G Mobile Devices –

– Packaged Filters Will be Manufactured Using a 100% North American Supply Chain –

– Micro Package Compatible Across Entire XBAW® Filter Product Line for Mobile, CPE and Infrastructure –

Charlotte, N.C., Feb. 01, 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 it has locked the process flow for its new wafer-level-chip-scale-packaging (WLCSP). The new package is designed to support the Company’s entire XBAW® RF filter product line including filters for 5G mobile devices, 5G network infrastructure and WiFi consumer premise equipment (CPE).

The first WLCSP device is expected to be technology qualified later this quarter with production release expected in the June 2021 quarter. The new package offers a significantly smaller filter footprint given its 1-to-1 ratio to the size of the filter die. The fully packaged XBAW filters using this new WLCSP have been designed, developed and will be 100% manufactured in North America.

Jeff Shealy, Founder & CEO of Akoustis, stated, “This first WLCSP process flow will open up significant new markets for Akoustis as we will now be able to provide XBAW® filters to address the size requirements of 5G mobile devices – as well as provide micro-filter solutions for network infrastructure and consumer premise equipment.” Mr. Shealy continued, “WLCSP is currently the most in-demand chip-scale-packaging in the mobile industry and we are thrilled to be able to offer this new technology to our growing list of customers.”

Akoustis’ high frequency, high performance XBAW® process and filters are experiencing growing interest as the Company entered production in multiple markets in calendar 2020, including 5G network infrastructure, high-band WiFi and phased-array radar applications.

Akoustis has added 15 filters to its product catalog including 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,” “estimate,” “predict,” “intend,” “forecast,” “seek,” “potential,” “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; the results of our research and development activities, including uncertainties relating to semiconductor process manufacturing; the development of our XBAW® technology and products presently under development and the anticipated timing of such development; our ability to protect our intellectual property rights that are valuable to our business, including patent and other intellectual property rights; 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; the ability to achieve qualification of our products for commercial manufacturing in a timely manner and the size and growth of the potential markets for any products so qualified; 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; any security breaches or other disruptions compromising our proprietary information and exposing us to liability; our ability to raise funding to support operations and the continued development and qualification of our products and the technologies underlying them; our ability to service our outstanding indebtedness represented by our \$15.0 million principal amount of convertible senior secured notes due in March 2021; and 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; our ability to maintain effective internal control over financial reporting; and our ability to obtain and maintain the Trusted Foundry accreditation of our New York wafer fabrication facility. 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 subsequently 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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Source: Akoustis, Inc.