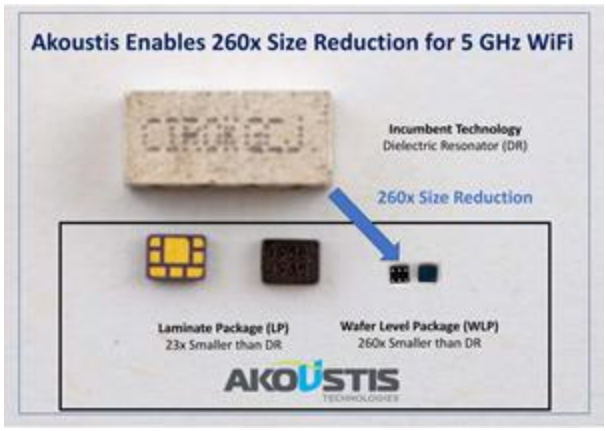
January 9, 2020

Akoustis Completes Wafer Level Package Demonstrator and Ships Sample to Tier-1 Mobile Device OEM

– WLP Package Footprint Enables Form Factor Suitable for 5G Mobile Device Market –



First WLP Demonstrator

– Qualified WLP Packaging Expected in the Second Half of CY20 –

Las Vegas, NV, Jan. 09, 2020 (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 it has completed its first wafer level packaging (WLP) demonstrator and sampled product to a multi-billion-dollar tier-1 mobile device OEM.

This initial WLP demonstrator leverages Akoustis’ 5.2 GHz WiFi coexistence filter technology that is up to 260 times smaller than existing dielectric resonator (DR) filters used in routers and similar non-mobile products. The footprint of the new sample filter is 1.25 mm x 1.05 mm x 0.3 mm, in-line with competing BAW micro filters that are being used in 4G and 5G mobile devices. These devices include cellular handsets, laptops, tablets and other devices.

The Company’s first WLP sample utilizes the Company’s completed and locked 5.2 GHz WiFi filter, with future WLP designs to focus on 5 GHz WiFi and 5G mobile frequencies in the sub-6 GHz bands including n41, n77, n78 and n79. Once qualified in the second half of calendar 2020, the WLP package technology will enable the Company’s XBAW RF filter technology to achieve a form-factor attractive for mobile devices.

Jeff Shealy, Founder and CEO of Akoustis, stated, “Working with our packaging partner to

develop a WLP technology for our RF filter chips is a significant milestone for Akoustis as we begin to achieve packaged form-factors for our XBAW™ filter solutions suitable for mobile devices. Once fully qualified, we will be positioned to target 5G mobile handset OEMs, tablet and laptop OEMs either directly to OEMs or through RF module partnerships."

Mr. Shealy continued, "We have expanded sampling to one of the world's largest OEMs, and we look forward to working with partners and customers to develop qualifiable, commercial wafer level packaging moving forward."

The 5.2 GHz filters are designed and manufactured using the Company's patented XBAW process and manufactured in the Company's Si-MEMS Wafer Fab located in Canandaigua, NY. The packages have been designed by Akoustis and made using a high-volume manufacturing partner.

The New WLP Demonstrator features:

- High frequency 5.2GHz operation
- Wide bandwidth covering greater than 100 MHz
- Low insertion loss in filter passband
- Single-ended input/output ports
- Ultra-small form factor allow integration in module

Akoustis has introduced several new filters over the past twelve months including a 5.6 GHz WiFi filter, a 5.2 GHz WiFi filter, a 4.9 GHz band n79 filter for small cell network infrastructure, a 3.8 GHz filter and five S-Band filters for defense phased-array radar applications, a 3.6 GHz filter for the CBRS infrastructure market and band 25 downlink and uplink filters for LTE infrastructure. 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® (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 certified 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," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "predict," “intend,” “forecast,” “seek,” "potential," "continue" and similar words, although some forward-looking statements are expressed differently. Forward-looking statements are neither historical facts nor assurances of future performance. 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 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 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; the rate and degree of market acceptance of any of our products; our ability to raise funding to support operations and the continued development and qualification of our products and the technologies underlying them; and our ability to service our outstanding indebtedness. 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.

Attachment

- Akoustis' Wafer Level Package Solution

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