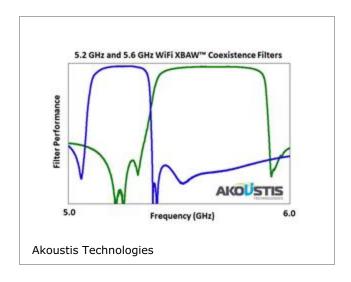


Akoustis Announces Its First Tandem 5.2 GHz / 5.6 GHz WiFi Filter Pre-Production Order from a New Tier-1 SoC Customer

Akoustis' Coexistence BAW Filter Solutions to be Evaluated for 802.11ax Tri-Band WiFi
 CPE Reference Design Suitable for 2X2 and 4X4 MU-MIMO –



- Company Expands Sampling of the World's First Tandem 5 GHz BAW Micro Filter
 Solution for Tri-Band WiFi –
- Delivery of New Pre-Production Order to Third SoC Customer Expected in the September
 Quarter –

Charlotte, N.C., May 23, 2019 (GLOBE NEWSWIRE) -- Akoustis Technologies, Inc. (NASDAQ: AKTS) ("Akoustis" or the "Company"), a designer and manufacturer of patented bulk acoustic wave (BAW) high-band RF filters for mobile and other wireless applications, announced today it has received its first pre-production order from a new Tier-1 global system-on-chip (SoC) maker for Akoustis' tandem 5.2 GHz / 5.6 GHz WiFi coexistence filters for a reference design targeting tri-band WiFi customer premise equipment (CPE).

Akoustis expects to ship pre-production filters to this multibillion-dollar SoC customer for evaluation and approval in the September quarter. This new customer is the third SoC maker to order WiFi filters for possible inclusion in a reference design, with the first two ordering 5.2 GHz filters in late CY18 and early CY19.

Akoustis' 5.2 and 5.6 GHz filters operate in tandem to create the world's first BAW

coexistence filter solution for tri-band WiFi equipment, offering a significant size advantage over existing dielectric resonator filters with up to 23 times smaller footprint. The filters provide low insertion loss, meet the demanding coexistence rejection specifications, and can be surfaced mounted.

Jeff Shealy, Founder and CEO of Akoustis, stated, "We are thrilled to announce our first preproduction order for our tandem 5.2 GHz / 5.6 GHz WiFi XBAW™ filters from a new customer which represents our third SoC customer. Both WiFi filters leverage our patented XBAW™ filter process and utilize our backend supply chain." Mr. Shealy continued, "Akoustis is currently sampling its high performance 5.2 GHz and 5.6 GHz filters to multiple leading WiFi SoC and OEMs while preparing to deliver these products in high volume quantities."

The reference design is expected to be compatible with both 2X2 and 4X4 multi-user multiple-in, multiple-out (MU-MIMO) architectures for the 802.11ax WiFi radio standard. Regarding filter content for tri-band architectures, a 2X2 MU-MIMO CPE requires four 5 GHz filters and a 4X4 requires eight 5 GHz filters.

Akoustis' filters are designed and manufactured using the Company's patented XBAW™ process and manufactured in the Company's <u>Si-MEMS Wafer Fab</u> located in Canandaigua, NY. The Company has multiple patents-pending related to its 5.2 GHz and 5.6 GHz filter architecture, performance specifications and module configuration.

Akoustis has introduced several new filters over the past twelve months using its proprietary XBAW manufacturing process including a <u>5.6 GHz WiFi filter</u>, a <u>5.2 GHz</u> WiFi filter, a <u>3.8 GHz filter</u> for defense phased-array radar applications, a 3.6 GHz filter for the <u>CBRS infrastructure</u> market and <u>Band 25 downlink and uplink filters</u> 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 XBAWTM 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

• <u>5.2 GHz & 5.6 GHz WiFi XBAW</u> Coexistence Filters

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Source: Akoustis, Inc.