

November 8, 2019



# Akoustis Ships 60,000 Pre-Production 5.6 GHz WiFi Filters to Leading RF Customer

**– Akoustis Expanding Pre-Production of Ultra-Wideband 5.6 GHz Filter for Tri-Band WiFi CPE –**  
**– 5.6 GHz Filter Works in Tandem with Akoustis’ 5.2 GHz Filter to Create the World’s First High-Band WiFi BAW Coexistence Filter Solution –**

**Charlotte, N.C., Nov. 08, 2019 (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 shipped 60,000 pre-production 5.6 GHz BAW filters to a leading global supplier of RF solutions, targeting tri-band WiFi customer premise equipment (CPE).

In March of this year, Akoustis and this global RF company executed a non-exclusive product development and supply agreement for RF coexistence filters along with a statement of work for new WiFi CPE filter solutions to support the customer’s expanding product portfolio. This includes the Akoustis’ tandem 5.2 GHz and 5.6 GHz coexistence XBAW filters, which combine to make the world’s first microfilter solution for high band WiFi CPE.

Akoustis expects to make additional volume commercial shipments to this customer in calendar 2020 and beyond as part of the agreement.

An executive from the Company’s global RF customer previously stated, “Akoustis’ XBAW technology is outstanding, even as compared with other BAW technology in the industry. We believe this leading filter technology can deliver in the high-frequency bands for WiFi networking and 5G mobile and will help us deliver significant growth over the next several years.”

This customer chose the Akoustis 5 GHz WiFi coexistence filter solution given the 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 surface mounted.

Jeff Shealy, Founder and CEO of Akoustis, stated, “Our team continues to execute, hitting another important milestone and highlighting our ability to scale XBAW production, including this new and challenging wideband 5.6 GHz coexistence filter.”

Mr. Shealy continued, “With this shipment, and the shipment of 80,000 5.2 GHz WiFi tandem filters earlier this year, our RF solutions customer is now well positioned to begin capturing share in multiple markets and help deliver new revenue streams in calendar 2020 and beyond.”

## **The 5.6 GHz XBAW WiFi filter features:**

- Low insertion loss passband filter
- Wide bandwidth covering entire 345 MHz UNII 2C+3 passband
- High rejection enables co-existence with adjacent WiFi UNII bands
- Single ended Tx/Rx ports
- High power rating, maximum +30dBm
- Ultra small form factor 2.5mm x 2.0mm x 0.9mm
- Performance over -40C to +85C
- RoHS compliant, Pb-free package

The 5.6 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.

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](#) 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](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 [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<sup>TM</sup> 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.

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