

September 23, 2020



# Akoustis Receives XBAW RF Filter Design Win and Order from New 5G Small Cell Infrastructure Customer

**– Band n79 Filter for New Small Cell Product Aimed at 5G Network Operators –  
– Akoustis Expects Production Ramp in Early CY21 –**

**Charlotte, N.C., Sept. 23, 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 that it has received a design win and pre-production order for band n79 XBAW™ filters from a new 5G small cell network infrastructure customer. This is the second customer in 5G small cell infrastructure where Akoustis now has more than five active engagements.

The new customer has completed sampling of the Akoustis band n79 filter and plans to use the current order to complete qualification and test its new 5G network infrastructure equipment before commercial launch in early calendar 2021.

Akoustis is currently shipping two XBAW™ RF filter designs in band n77 to its first 5G small cell network infrastructure customer. In addition to the two design wins with its first customer, Akoustis has active engagements with numerous tier-1 and tier-2 small cell network equipment OEMs who are currently evaluating the Company’s existing band n77 and n79 RF filter solutions. In addition, multiple OEMs have indicated the desire for additional new filters in the sub-6 GHz 5G bands.

Jeff Shealy, Founder and CEO of Akoustis, stated, “Our XBAW™ products continue to see increased demand as OEMs, ODMs and SoC makers push into ultra-high band markets including sub-6 GHz 5G, WiFi 6 and WiFi 6E.” Mr. Shealy continued, “We are pleased to receive this design win and pre-production order for our band n79 5G XBAW™ filter from our new 5G small cell customer, and expect to add other new customers in the coming months.”

This design win highlights the increased demand for BAW filters in the rapidly growing 5G small cell market and underscores Akoustis’ leadership in delivering BAW filters at ultra-high frequencies. XBAW™ filters are uniquely suited to serve the 5G network infrastructure market given the ability to handle high frequency, wide bandwidth, and high power.

5G small cell base stations are low power, short range cellular transmission devices, capable of providing extended coverage for consumers, enterprises or to augment cellular coverage for 5G mobile service providers. They offer all the standard characteristics of a traditional tower base station and can handle high data throughput. 5G networks are expected to employ small cells in greater quantity than prior networks to help mitigate the shorter wavelengths associated with higher frequencies.

In a recent report, Zion Market Research estimated the global small cell 5G network market was valued at around \$381 million in 2018 and is expected to reach approximately \$3.5 billion by 2025, at a CAGR of approximately 37% between 2019 and 2025.

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

Akoustis has added 14 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](#), 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 [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 achieve design wins from current and future customers; 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; and the effects of a pandemic or epidemic or a natural disaster, including the Covid-19 pandemic. 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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