

January 14, 2020



# Akoustis Receives Second 5G Network Infrastructure Development Filter Order from Tier-1 Customer for 5G Massive MIMO Architecture

– Akoustis’ 5G Infrastructure Customer Targeting Production by Mid-2020 –

– Accelerating 5G Infrastructure Demand Outpacing Other Markets –

Charlotte, NC, Jan. 14, 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 received a follow-on development filter order from its initial 5G network infrastructure customer.

Akoustis entered into an initial development agreement with this multi-billion-dollar Tier-1 customer late in calendar 2018 with the goal of delivering high performance, high frequency XBAW filters for 5G massive MIMO base station architectures. Akoustis’ XBAW filters would improve spectral efficiency per cell necessary for the increased capacity requirements of 5G networks.

The 5G massive MIMO sub-6 GHz large array architectures demand RF filter solutions that meet the frequency, bandwidth and power requirements - but in a smaller, lower weight filter solution compared to conventional, expensive cavity filters. Akoustis was chosen to develop micro acoustic XBAW filters for this customer given a combination of providing an ultra-small form factor solution satisfying the difficult RF as well as high-power handling.

With this second development order, the 5G network infrastructure customer has moved beyond the initial test and measurement stage and is validating potential design architectures incorporating Akoustis 5G infrastructure XBAW filters. Given the large number of radios in 5G massive MIMO base stations, this customer relationship is expected to drive significant revenue for Akoustis upon product acceptance and release, which is expected by mid-to-late-2020.

Jeff Shealy, Founder and CEO of Akoustis, stated, “We are excited to achieve this important milestone with our first 5G network infrastructure customer. The massive MIMO opportunity is a large and attractive market for our disruptive XBAW RF filter technology.”

Mr. Shealy continued, “While these 5G infrastructure XBAW filters are more challenging from a design perspective, they carry a significantly higher ASP and gross margin profile compared to other consumer-related filter applications in our sales pipeline. We look forward to completing this phase, and moving into pre-production and eventual production with our tier-1 customer.”

The 5G network infrastructure 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](#) 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](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 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.

Contact:

COMPANY:

Tom Sepenzis

Akoustis Technologies

VP of Corporate Development & IR

(980) 689-4961

tsepenzis@akoustis.com

The Del Mar Consulting Group, Inc.

Robert B. Prag, President

(858) 794-9500

bprag@delmarconsulting.com



Source: Akoustis, Inc.