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# **Resonant Announces Upgraded WaveX™ Design Software for Acoustic Wave Filter Development, Specifically Enhanced for 5G, Wi-Fi, and Ultra-wideband RF Filters**

**Platform is now cloud-based with full 3D finite element modeling to enable XBAR® design workflow; enhancements enable simulation of resonators and filters not possible with today's commercially available tools**

AUSTIN, Texas, June 21, 2021 (GLOBE NEWSWIRE) -- Resonant Inc. (NASDAQ: RESN), a provider of radio frequency (RF) filter solutions developed on a robust intellectual property platform, designed to connect People and Things, today announced WaveX™, Resonant's upgraded finite element modeling (FEM) software platform used for designing RF filters.

WaveX™ is the upgraded version of Resonant's legacy Infinite Synthesized Networks (ISN®) design software. The new platform delivers full 3D finite element modeling simulation capability to design RF filters, and leverages a hybrid multi-cloud, large-memory GPU-powered implementation.

"By leveraging our suite of software design tools, Resonant takes an innovative approach to RF filter design that results in superior performance, cost savings, and significantly faster time to market," said George B. Holmes, Chairman and CEO of Resonant. "With WaveX™, we are able to accurately simulate the performance of our XBAR® technology and port designs across multiple foundries. Using WaveX™, we can effectively identify causes of spurs, optimize isolation, minimize insertion loss, manage bandwidth and center frequency, which are a few of the critical requirements for high-performance 5G, Wi-Fi and Ultra-wideband (UWB) filters.

"WaveX™ demonstrates the superiority of our XBAR® technology to natively meet the demands of the 5G spectrum. Compared to the limited general-purpose offerings from other filter design tools in the market, WaveX™ is designed to enable a dramatic improvement to designer workflow efficiency and scalability, as well as exceptional accuracy and precision. Coupled with the on-demand cost optimization of the cloud implementation, we are providing filter designers with an unmatched solution to fulfill the promise of next-generation wireless networks."

Resonant creates designs for difficult RF frequency bands and modules that meet challenging and complex 5G, Wi-Fi and UWB RF front-end requirements. Using WaveX™, Resonant's designs have the potential to be developed in half the time and manufactured at a lower cost than traditional approaches. WaveX™ is a suite of proprietary algorithms,

software design tools and network synthesis techniques that enables Resonant to explore a much larger set of possible design solutions.

Resonant delivers rapid design simulations to its customers, which they manufacture in their captive fabs or have manufactured by one of Resonant's foundry partners. These improved solutions still use Surface Acoustic Wave (SAW) or Temperature Compensated Surface Acoustic Wave (TC-SAW) technologies with the performance of higher cost manufacturing methods like Bulk Acoustic Wave (BAW).

Resonant's WaveX™ delivers excellent predictability, enabling achievement of the desired product performance in roughly half as many turns through the fab. In addition, Resonant's simulations model fundamental material and structure properties, which makes integration with foundry and fab customers much more intuitive, because they speak the "fab language" of basic material properties and dimensions.

### **About Resonant Inc.**

Resonant (NASDAQ: RESN) is transforming the market for RF front-ends (RFFE) by disrupting the RFFE supply chain through the delivery of solutions that leverage our WaveX™ design software tools platform, capitalize on the breadth of our IP portfolio, and are delivered through our services offerings. In a market that is critically constrained by limited designers, tools and capacity, Resonant addresses these critical problems by providing customers with ever increasing design efficiency, reduced time to market and lower unit costs. Customers leverage Resonant's disruptive capabilities to design cutting edge filters and modules, while capitalizing on the added stability of a diverse supply chain through Resonant's fabless ecosystem-the first of its kind. Working with Resonant, customers enhance the connectivity of current mobile devices, while preparing for the demands of emerging 5G applications.

To learn more about Resonant, view the series of videos published on its website that explain Resonant's technologies and market positioning:

- [Resonant Corporate Video](#)
- [WaveX™ Design Technology and XBAR®: Speeding the Transition to 5G](#)
- [Expert Insights on Unlocking the Potential of 5G](#)
- [The Technology Enabling the Transition to 5G](#)

For more information, please visit [www.resonant.com](http://www.resonant.com).

Resonant uses its website (<https://www.resonant.com>) and LinkedIn page (<https://www.linkedin.com/company/resonant-inc-/>) as channels of distribution of information about its products, its planned financial and other announcements, its attendance at upcoming investor and industry conferences, and other matters. Such information may be deemed material information, and Resonant may use these channels to comply with its disclosure obligations under Regulation FD. Therefore, investors should monitor the company's website and its social media accounts in addition to following the company's press releases, SEC filings, public conference calls, and webcasts.

### **Safe Harbor / Forward-Looking Statements**

This press release contains forward-looking statements, which include the following subjects, among others: the capabilities of our software tools. Forward-looking statements are made as of the date of this document and are inherently subject to risks and uncertainties which could cause actual results to differ materially from those in the forward-looking statements, including, without limitation, the following: our limited operating history; our ability to complete designs that meet customer specifications; the ability of our customers (or their manufacturers) to fabricate our designs in commercial quantities; our customers' ability to sell products incorporating our designs to their OEM customers; changes in our expenditures and other uses of cash; the ability of our designs to significantly lower costs compared to other designs and solutions; the risk that the intense competition and rapid technological change in our industry renders our designs less useful or obsolete; our ability to find, recruit and retain the highly skilled personnel required for our design process in sufficient numbers to support our growth; our ability to manage growth; and general market, economic and business conditions. Additional factors that could cause actual results to differ materially from those anticipated by our forward-looking statements are under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our most recent Annual Report (Form 10-K) or Quarterly Report (Form 10-Q) filed with the Securities and Exchange Commission. Forward-looking statements are made as of the date of this release, and we expressly disclaim any obligation or undertaking to update forward-looking statements.

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