June 6, 2022

WiSA Technologies' New 2.4 GHz Multichannel DS Audio Soundbar Module Outperforms Leading 5 GHz Modules in Independent Testing

DS Module Designed Specifically to Operate in Congested Wi-Fi Environments – Demonstrates Better Reliability than Higher-Cost 5 GHz Modules

BEAVERTON, Ore.--(BUSINESS WIRE)-- WiSA Technologies, Inc. announces the results of independent lab testing of WiSA's new DS 2.4 GHz multichannel wireless audio module which is designed specifically for soundbars with wireless rear speakers and a subwoofer. The testing compares the reliability of the DS module in a typical home environment to the reliability of two of the market-leading competitive solutions.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20220606005248/en/

(Graphic: Business Wire)

Each of the competitive solutions operates in the faster 5 GHz portion of the wireless spectrum and in each case, the DS module outperforms the competition demonstrating its superior reliability, even in the most crowded of Wi-Fi environments. Testing was performed by Novus Labs, a well-respected testing laboratory with expertise in both audio and wireless. Novus Labs' customers include audio brands such as Bose, Sonos, Roku and Sony.

"We asked Novus to test the reliability of multichannel audio modules in a real-world environment," said Tony Parker, VP Technical Marketing for WiSA Technologies. "In the average home, more and more devices are streaming higher and higher resolution content, which means traffic over a Wi-Fi network is getting more and more congested. We wanted to know how this increase in congestion affects our new DS transceiver module as well as our competitors' solutions."

Test Results

Novus Labs recorded the number of audio dropouts and glitches that occurred over a 10-minute period at different levels traffic congestion over the Wi-Fi network (baseline, 25%, 50%, 75%, and 100% congestion). Testing results are shown below.

Network congestion leads to a degradation of quality of service (QoS). In the case of audio streams, overly congested networks can result in audio dropouts and glitches that consumers can hear. Most audio solutions on the market manage this by detecting heavily-trafficked wireless channels and quickly switching to open channels, commonly referred to as

“Detect and Avoid.”

As the number of wireless devices increases in homes, it has become extremely difficult to avoid congestion; products using “Detect and Avoid” can no longer guarantee a high level of QoS. WiSA’s DS technology was designed to maintain the highest quality audio even in the most congested wireless environments. Novus Labs’ test results demonstrate WiSA DS’s reliability is 1.5 to 3 times better than competitive products currently in the market.

“We were extremely pleased to see that our 2.4 GHz DS module outperforms competitive solutions running in the 5 GHz spectrum,” continued Tony Parker. “We encourage any brands building multichannel wireless audio products to evaluate WiSA’s DS solution and learn firsthand how this cost-effective module can provide more channels of audio with greater reliability than competitive products.”

WiSA DS Module Overview:

- 5 separate audio channels ideal for ATMOS soundbars and standalone home theater systems
    - TX: transmits up to 4 separate audio channels plus high-fidelity subwoofer
    - RX: a single module in RX mode can output up to 2 audio channels
- Tight speaker synchronization maintained
- Fixed low latency meeting the ITU and Dolby specifications for lip-sync
- Wi-Fi compatible - designed to work within the Wi-Fi protocol and operate in highly congested wireless environments

For more information on the DS module, or the testing of the DS module, please contact jcheng@wisatechnologies.com.

For general information on WiSA Technologies, visit the company’s new website at www.wisatechnologies.com.

About WiSA Technologies, Inc.

WiSA Technologies, Inc. (NASDAQ: WISA) is a leading provider of immersive, wireless sound technology for intelligent devices and next-generation home entertainment systems. Working with leading CE brands and manufacturers such as Harman International, a division of Samsung; LG; Hisense; TCL; Bang & Olufsen; Platin Audio; and others, the company delivers immersive wireless sound experiences for high-definition content, including movies and video, music, sports, gaming/esports, and more. WiSA Technologies, Inc. is a founding member of WiSA™ (the Wireless Speaker and Audio Association) whose mission is to define wireless audio interoperability standards as well as work with leading consumer electronics companies, technology providers, retailers, and ecosystem partners to evangelize and market spatial audio technologies driven by WiSA Technologies, Inc. The company is headquartered in Beaverton, OR with sales teams in Taiwan, China, Japan, Korea, and California.

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Source: WiSA Technologies, Inc.