Ralink Unveils Next-Gen Dual-Band 2x2 802.11n/Bluetooth 3.0+HS Combo Module

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Ralink Technology, a developer of high performance wired and wireless networking solutions, today announced the RT3592BC8, the world's only chipset capable of simultaneous 300 Mbps 2x2 MIMO dual band 802.11n and Bluetooth 3.0+HS operation. The half MiniCard solution for PCs, notebooks, netbooks and connected mobile devices delivers an unprecedented level of performance and intelligent coexistence between Wi-Fi and Bluetooth.

With support for concurrent operation of dual-band 802.11n Wi-Fi and Bluetooth's highest performance modes, the RT3592BC8 elevates wireless mobile computing into a new level of multimedia capability. Peer-to-peer gaming, shared and tethered connections can now be

initiated via the simplicity of Bluetooth 3.0+HS detection and setup while 2x2 MIMO 802.11n dual-band Wi-Fi boosts data rates to 300Mpbs. Able to function in both 2.4GHz and 5GHz, the RT3592BC8 eliminates interference by allowing Wi-Fi and Bluetooth components to coexist in the same band or to function in separate frequency bands.

“Ralink’s new RT3592BC8 integrates all of the key wireless technologies into a single highly-integrated solution,” said Craig Mathias, principal at the wireless and mobile advisory firm Farpoint Group. “The combination of 802.11n and high-speed Bluetooth provides the best of both worlds, and we view dual-band functionality as essential to all successful implementations.”

In addition to dual frequency band operation, the RT3592BC8 combo solution ensures optimal radio coexistence between WLAN and Bluetooth with a sophisticated coexistence algorithm for improved harmony between co-located WLAN and Bluetooth radios. It dynamically adjusts WLAN and Bluetooth transmission parameters to reduce interference, maximize performance, and automatically adjust to the presence and operating characteristics of nearby Wi-Fi networks. The result is a solution that delivers up to 80 percent faster WLAN throughput compared to other vendors’ WLAN plus Bluetooth combo solutions.

Leveraging its single-chip 2x2 dual-band 802.11n architecture, Ralink has further integrated 14 components, saving additional cost and delivering better performance compared to discrete Wi-Fi and Bluetooth solutions. The optimized bill of material, simplified design, and integrated manufacturing and testing procedures enables Ralink customers to deliver cost-effective yet high-performance solutions in an easy-to-integrate standard half MiniCard form factor.

Source: Ralink Technology