ON Semiconductor's Quantenna Connectivity Solutions Division Introduces Wi-Fi 6 Spartan Router Reference Design to Meet Most Demanding Wireless Network Performance and Coverage Requirements

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PHOENIX, Ariz., Sept. 10, 2019 (GLOBE NEWSWIRE) -- Quantenna Connectivity Solutions, a division of ON Semiconductor (Nasdaq: ON), has announced its latest Spartan Router advanced Wi-Fi reference design. Based on the QSR10GU-AX 8x8 multiple input, multiple output (MIMO) dual-band dual concurrent Wi-Fi 6 chipset coupled with NXP's LS1043A 1.6GHz quad-core network processor, Spartan Router design offers unrivalled coverage and network capacity for OEMs to accelerate deployment of best-in-class Wi-Fi 6 routers to both retail and service providers' markets.

Spartan Router

Spartan Router design addresses the increasingly high demand for wider in-home coverage, along with providing the level of performance needed to meet demanding applications, such as 4K video streaming, online gaming, cloud synchronization and connecting an increasing number of smart home products. A comprehensive array of supporting assets is also offered to aid implementation and use, including hardware design files and a software development kit, as well as industrial design files. Equipment vendors benefit from using the ready-made reference design to bring disruptive products to market rapidly, with reduced development time and costs.

The new Wi-Fi 6 router design supports dual-band, dual concurrent mode with 8x8 MIMO at 5GHz plus 4x4 MIMO at 2.4GHz 12-stream operation. It comes with 2.5G Ethernet WAN & LAN ports, a built-in NFC (Near-Field Communication) reader for easy Wi-Fi pairing, and a hardware accelerator that optimizes low latency and QoS (Quality-of-Service). Key features include true 8x8 spatial stream sounding, massive MU-MIMO and Wi-Fi features such as orthogonal frequency-division multiple access (OFDMA), transmit beamforming, 1024-QAM, and target wake time (TWT). The SmartScan feature gives zero-wait dynamic frequency selection (DFS) and enhanced scanning. The reference design includes ON Semiconductor's Qdock, which supports third-party applications such as motion detection, channel state information (CSI) and Radio Frequency (RF) sensing to help ease integration into customer applications.

"ON Semiconductor continues to bring the best Wi-Fi 6 products to smart homes and the rapidly evolving retail market," said Irvind Ghai, vice president of marketing, Quantenna Connectivity Solutions at ON Semiconductor. "Spartan Router design is our flagship solution showcasing the new paradigm of Wi-Fi 6 gateways that provide superior performance in terms of throughput, speed, coverage and cost efficiency."

"Spartan Router leverages NXP's gigabit networking expertise and ON Semiconductor's leading 8x8 Wi-Fi 6 solution to bring enterprise-class performance to the smart home," said Noy Kucuk, vice president of product management, NXP. "It is also the first retail solution to feature an NFC reader, also supplied by NXP."

Availability
Spartan Router reference design files and prototypes are available now. ON Semiconductor will showcase the reference design during IBC2019, September 13-17, 2019, at Hall 15, MS14 & MS18, RAI, Amsterdam. Please contact ON Semiconductor sales representatives for samples and pricing, or scheduling a meeting at IBC.

To learn more, read the blog: Quantenna Connectivity Solutions Returning to IBC2019 as Part of ON Semiconductor with New Spartan Router Reference Design

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