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## Quantenna Launches the World's First Wireless Chipsets that Deliver Guaranteed Bandwidth for High Speed Wireless Networking

### Advanced Configurable 4x4 MIMO Chipsets with Transmit Beamforming Enable Ultra Reliable Wireless Bandwidth and Unprecedented Performance up to 1 Gbps

**SUNNYVALE, Calif., October 14, 2008** - Quantenna Communications, Inc., a developer of silicon for intelligent wireless networking, today announced the world's first fully integrated 802.11n chipsets with 4x4 MIMO and transmit (Tx) beamforming, which are designed to deliver guaranteed wireless bandwidth within any home, anywhere. The Quantenna High Speed (QHS™) family of chipsets pioneers a new level of ultra reliability for delivering high-definition (HD) multimedia content over wireless networks. With its advanced architecture – which includes vector mesh routing, two or four concurrent bands and throughput link rates in excess of 1 Gbps – Quantenna has taken the technology lead in establishing a new approach to intelligent wireless networking.

Quantenna designed its chipsets to meet the demands of the rapidly growing wireless LAN (WLAN) market. Network equipment and consumer electronics manufacturers demand for Wi-Fi chipsets is expected to reach about \$6 billion with 938 million units by 2012, according to market research from In-Stat.

“With this announcement, Quantenna has taken a major leap forward in wireless LAN chipset architecture, throughput and reliability,” said Craig Mathias, a principal at the mobile and wireless advisory firm Farpoint Group. “I’m very impressed with the flexibility and configurability of their offering, which make it appropriate for a broad range of applications. In a highly-competitive market where performance and innovation predominate, Quantenna has staked out an impressive position.”

Wi-Fi has become the prominent technology of choice for home networking and consumer devices, requiring wireless networks to support more bandwidth-intensive applications, such as wireless HD, HDTV and Internet protocol television (IPTV) services. However, wireless home and enterprise networks frequently suffer from dead zones, unreliable bandwidth, poor coverage and signal interference. While many 802.11 chipsets are suitable for data transmission, they are not robust enough to support reliable multimedia services. As a result, equipment vendors have tried to combine disparate technologies, but have not been able to achieve guaranteed wireless bandwidth.

The new Quantenna chipsets – QHS1000, QHS600 and QHS450 – overcome interference and dead zones, enabling consumers and carriers to reliably deploy wireless HD, HDTV and IPTV services, to any point in the home over a plug-and-play wireless network. The QHS chipsets are the first in the industry to bring together the following technologies in a standards-compliant 802.11n solution:

- 1 **4x4 MIMO Radio/Transceiver** - Offers the highest possible reliability in high-interference conditions;
- 1 **Tx Beamforming** – Enables the chip to locate receiving devices and focus the signal on them, improving range and data rate while conserving transmitter power;
- 1 **Concurrent Dual Band Mode** – Supports real-time video transmission via the 5 Ghz band and data over the 2.4 Ghz band;
- 1 **Vector Mesh Networking** – Guarantees total coverage in any size home by using adaptive vector mesh routing; and
- 1 **Highest Integration** - Integrates high efficiency power amplifiers (PAs) with 18 dBm output power along with low-noise amplifier (LNA), variable gain amplifier (VGA), switches, baluns and duplexers that constitute a front-end module.

“Highly reliable wireless bandwidth is exactly what carriers are looking for,” said Corrado Rocca, senior vice president of Product Marketing and Development at Pirelli Broadband Solutions S.p.A, the Pirelli Group company specializing in broadband access technologies. “It eliminates the need for home rewiring and allows for seamless HDTV and ‘multiple play’ wireless connectivity, while enabling complete home coverage. The combination of advanced MIMO features, such as 4x4 radio, transmit beam forming, vector mesh networking and concurrent dual bands are all critical elements required to achieve an ultra reliable, high speed wireless bandwidth.”

“Our unique combination of cutting-edge 4x4 MIMO and Tx beamforming on the smallest footprint positions Quantenna in the forefront of the highly competitive Wi-Fi chip market,” said Dr. Behrooz Rezvani, Quantenna’s founder and CEO. “Through years of development and careful consideration of the challenges that have previously impeded ultra reliable wireless bandwidth, we can now enable our customers to meet the most demanding consumer challenges today, which is guaranteeing bandwidth.”

- | **QHS1000** – up to 1 Gbps link speed and 600 Mbps data throughput.
- | **QHS600** – up to 600 Mbps link speed and 400 Mbps data throughput.
- | **QHS450** – up to 450 Mbps link speed and 200 Mbps data throughput.

Quantenna's solutions also include the QHS Plug, which is a reference system that OEMs can use to produce wireless networking solutions that can be plugged into any power outlet, and the Quantenna Operating Software (OS), a full-featured access point routing software that significantly accelerates development time and works in conjunction with QHS chips.

Quantenna will begin sampling its QHS family of chipsets with top-tier customers in both the retail and carrier markets in Q4 2008. Pricing is available upon request.

## **About Quantenna Communications, Inc.**

Quantenna Communications, Inc. is a fabless semiconductor company developing next-generation chipsets that deliver the highest levels of performance, speed and reliability for wireless networks and devices. Headquartered in Sunnyvale, Calif., Quantenna has assembled a management and engineering team with a long track record of start-up success, and is backed by some of Silicon Valley's most esteemed venture capital firms, including Grazia Equity, Sequoia Capital, Sigma Partners and Venrock Associates.