Broadcom Introduces the Industry's First 5G Radio Switch

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Terabit Device Extends Ethernet Beyond Cellular Base Stations to the Radio, with Direct Connections to Both Deployed LTE and Next-Generation 5G Radios

SAN JOSE, Calif., March 12, 2018 (GLOBE NEWSWIRE) -- Broadcom Limited (NASDAQ:AVGO), today announced the immediate availability of the Broadcom® Monterey Ethernet switch (BCM56670), the industry's first built specifically for cellular fronthaul networks. This high capacity device meets the stringent performance demands of new Ethernet-based 5G radios and supports existing CPRI-based radios, thus consolidating all radio traffic onto a standard, Ethernet-based infrastructure. The introduction of the Monterey Ethernet switch strengthens Broadcom's position as a market leader in carrier-class radio networking components.

The 5G build-out will require an increase in capacity of the mobile network by a factor of ten or more and a simultaneous tightening of key synchronization requirements by a factor of two or more. Ethernet technology is very high capacity, but in the past it has not met the strict synchronization and jitter requirements of cellular networks. The IEEE's new 802.1CM (Time-Sensitive Networking for Fronthaul) standard provides a synchronization solution that solves this problem and the cellular network can now be upgraded to an end-to-end Ethernet-based architecture that meets the cost, capacity, and performance requirements of 5G.

The Monterey Ethernet switch is the result of the careful integration of a full set of radio-centric features with a terabit-class platform based on Broadcom's widely adopted switching portfolio. High-resolution, high-accuracy synchronization compliant with IEEE 802.1CM, CPRI-to-Ethernet bridging, and nanosecond-scale jitter and delay control together with IEEE new fronthaul standard have been added to this state-of-the-art Ethernet switch to address all 5G cellular networking requirements. The Monterey Ethernet switch shares a set of common API interfaces with other Broadcom switching products via Broadcom's Software Development Kit (SDK), thus minimizing development effort and accelerating system introduction.

"We are very pleased to announce another ground-breaking solution that addresses fundamental problems and opens a new, major market for our switching products," said Ram Velaga, vice present and general manager, Switch Products at Broadcom. "The Monterey Ethernet switch is an excellent example of Broadcom's deep commitment to 5G innovation and strategic R&D investment."

"5G will drive an order of magnitude increase in network-bandwidth requirements owing to faster radios and denser networks coupled with larger base stations serving more radios," said Bob Wheeler, principal analyst at The Linley Group. "As a result, the industry is moving away from point-to-point CPRI radio links and towards a switched Ethernet infrastructure based on new protocols like eCPRI and IEEE 1914. Broadcom has developed a unique solution by extending its terabit Ethernet switch to address this new radio fronthaul application by adding support for Ethernet-based 5G radios as well as installed CPRI-based LTE radios."

Key Attributes and Benefits of the Monterey Ethernet switch:
- Transports CPRI across standard Ethernet
- Enables cellular-system designers to leverage the merchant-silicon-based Ethernet ecosystem
- Connects directly to new Ethernet-based radios and installed CPRI-based radios
- Terabit-class capacity to meet the 10x increase in capacity needed by 5G networks
- Serves as a critical component in building mobile-edge computing platforms
- Hardware support for key 5G requirements, including nanosecond-scale synchronization

Availability
Monterey Ethernet switch (BCM56670) product samples and System Reference Kits are available immediately. Please contact Broadcom sales for details.

About Broadcom
Broadcom Limited (NASDAQ:AVGO) is a leading designer, developer and global supplier of a broad range of digital and analog semiconductor connectivity solutions. Broadcom Limited's extensive product portfolio serves four primary end markets: wired infrastructure, wireless communications, enterprise storage and industrial & other. Applications for our products in these end markets include: data center networking, home connectivity, set-top box, broadband access, telecommunications equipment, smartphones and base stations, data center servers and storage, factory automation, power generation and alternative energy systems, and electronic displays. For more information, go to www.broadcom.com.

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