



Broadcom Tomahawk® 3 Powers Arista Networks' New 400GbE Switching Systems

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World's highest-performance ethernet switch-on-chip now shipping in production at the heart of Arista 7060X4 Series

SAN JOSE, Calif., Oct. 23, 2018 (GLOBE NEWSWIRE) -- Broadcom, Inc. (NASDAQ: AVGO), today announced that the StrataXGS® Tomahawk® 3 series is shipping as the central switching chipset inside Arista Networks' new [7060X4 Series](#) of 400GbE cloud networking platforms.

The new systems announced by Arista, providing 32 ports of 400GbE connectivity over OSFP or QSFP-DD optical interfaces in a compact 1U hardware form factor, are each built using a single 12.8 Terabit/sec Tomahawk 3 BCM56980 device to provide full-duplex, line rate switching and routing across all ports. The Tomahawk 3 Series provides industry-leading 50G PAM-4 SerDes performance, the highest available Ethernet I/O and packet processing bandwidth on a single chip at 100/200/400GbE, as well as state-of-the-art buffering, load balancing, high-availability and network telemetry capabilities, tailored to the rigorous demands of software-defined cloud networks. Combined with Arista's robust, unified EOS® network operating system and optical integration of OSFP and QSFP-DD technologies, Tomahawk 3 enables the new 7060X4 systems to accelerate adoption of 400GbE network infrastructure in the cloud.

"Tomahawk 3 is an important catalyst for the build-out of 400 Gigabit Ethernet cloud networks," said Andreas Bechtolsheim, Chief Development Officer and Chairman of Arista Networks. "The four-fold increase in Ethernet link speed and substantially lower power and cost per bit enables cloud customers to build more scalable next-generation network fabrics in a cost and power efficient manner."

StrataXGS Tomahawk 3 Series Product Highlights:

- Supports line-rate, non-blocking 32 x 400GbE switching and routing on a single chip, with fully flexible I/O configuration to enable breakout to 64 x 200GbE ports, 128 x 100GbE ports, or any combination thereof
- Delivers quantum leap in hyperscale network performance, CAPEX and OPEX efficiency: 40% reduction in power per 100Gbps, and up to 75% lower cost per 100Gbps, versus alternatives
- New, state-of-the-art, integrated shared-buffer architecture offers 3X to 5X higher incast absorption and provides the highest performance and lowest end-to-end 99.9% latency for RoCEv2 based workloads
- Industry-leading Broadview™ Gen 3 integrated network instrumentation feature set and software suite, providing full visibility to network operators into packet flow behavior, traffic management state, and switch internal performance
- Comprehensively supports all packet processing and traffic management requirements for cloud-scale network use cases: up to Million-route forwarding scale, doubled ECMP scale, Dynamic Load Balancing and Group Multipathing, In-Band Network Telemetry, Elephant Flow detection and re-prioritization
- Robust connectivity using 256 instances of the industry's best performing and longest-reach 50G PAM-4 integrated SerDes core, enabling long-reach (LR) East-West optical links and Direct-Attached-Copper (DAC) in-rack cabling in the data center, fully compliant to new IEEE standards for 50/100/200/400GbE
- Multiple switch device variants at 12.8 Tbps (32x400GbE / 128x100GbE), 8.0 Tbps (48x100GbE + 8x400GbE), and 6.4 Tbps (16x400GbE / 64x100GbE), providing optimized performance, cost, and power based on application use case
- Implemented with unparalleled silicon area and power efficiency; qualified and shipping in volume on proven 16nm process technology node

About Broadcom Inc.

Broadcom Inc. (NASDAQ: AVGO) is a leading designer, developer and global supplier of a broad range of analog and digital 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, broadband access, telecommunications equipment, smartphones and base stations, data center servers and storage, factory automation, power generation and alternative energy systems, and displays. For more information, go to www.broadcom.com.

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