Broadcom Expands Tomahawk 4 Family, Increasing Leadership in the World's Highest Bandwidth Switch/Routing Silicon

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Two New Tomahawk Chips Announced While First Generation 25.6Tbps Silicon is Now Shipping in Volume

SAN JOSE, Calif., Dec. 02, 2020 (GLOBE NEWSWIRE) -- Broadcom Inc. (NASDAQ:AVGO) announced today a major expansion of its 25.6 terabits per second StrataXGS® Tomahawk® 4 family of switch/router chips. Broadcom also announced that the first member of the Tomahawk 4 family, Tomahawk-50G (BCM56990), is now shipping in volume. These products demonstrate the benefits of Broadcom's strategy of providing optimized chips for specific network needs, delivering twice the efficiency of any other alternative.

The only 25.6Tbps networking silicon available today, the Tomahawk4-50G switch/router began sampling in December 2019 and in less than one year is now shipping in volume. With 512 lanes of 50G PAM4 SerDes, Tomahawk4-50G provides twice the bandwidth of competing solutions. Implemented in 7nm process technology, it provides the world's lowest power per bit of throughput, enabling significant savings in operational expense and allowing for ultra-high density network equipment.

Building on this momentum, Broadcom is expanding the Tomahawk4 family to include two new chips:

- Tomahawk4-100G: 25.6Tbps, 256 x 100G PAM4
- Tomahawk4-12.8T: 12.8Tbps, 128 x 100G PAM4

With the addition of these new products, Broadcom has extended its lead in silicon optimized for hyperscale data centers. No other company offers the same variety of bandwidth levels and physical interfaces. Additionally, all members of the Tomahawk4 family of switch/router chips offer the benefits of:

- Fully-shared packet buffers, providing up to 10x the burst absorption versus alternatives.
- Twice the efficiency, on a per-chip basis, versus any other switch/routing silicon, enabling a 75 percent reduction in system power and latency.
- Common APIs shared with all other Broadcom switch/routing silicon families, enabling customers to choose the best architecture for a particular application, while leveraging their software development efforts throughout their networks.

"This expanded Tomahawk franchise underscores Broadcom's strategy of building best-in-breed switching and routing silicon for specific network applications," said Ram Velaga, senior vice president and general manager, Core Switching Group, Broadcom. "Not only does Broadcom offer optimized solutions for hyperscale, service provider, and enterprise networks, even within the chip families provided for hyperscale data centers, we have built dedicated chips to cover a range of SerDes speeds, bandwidth levels, and feature capabilities. No other company has an equivalent level of investment, IP availability, and velocity of execution. The result is that Broadcom consistently delivers the industry's highest performance and lowest power."

"By advancing the 25.6Tbps Tomahawk 4 from samples to volume shipments in less than one year, Broadcom has once again demonstrated its ability to deliver first on the highest performance switch/router silicon," said Bob Wheeler, principal analyst, The Linley Group. "The expansion of the Tomahawk family to include 50G PAM4 and 100G PAM4 SerDes variants means that hyperscalers can fully optimize their data centers with their choice of optical and electrical interconnect."

To learn more about the Broadcom Tomahawk family click here. For more information on all Broadcom products please visit www.broadcom.com.

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Broadcom Inc. (NASDAQ: AVGO) is a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. Broadcom's category-leading product portfolio serves critical markets including data center, networking, enterprise software, broadband, wireless, storage and industrial. Our solutions include data center networking and storage, enterprise, mainframe and cyber security software focused on automation, monitoring and security, smartphone components, telecoms and factory automation. For more information, go to www.broadcom.com.

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[1] Cisco Global Cloud Index: Forecast and Methodology, 2016-2021 White Paper, https://www.cisco.com/c/en/us/solutions/collateral/service-provider/global-cloud-index-gci/white-paper-c11-738085.pdf

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