



Broadcom Samples Industry's Highest-Performing Routing Chip at 14.4 Terabits per Second

September 10, 2020

New 7nm Jericho2c+ Delivers a 3X Routing Performance Increase Over Predecessor In Less Than Two Years

SAN JOSE, Calif., Sept. 10, 2020 (GLOBE NEWSWIRE) -- [Broadcom Inc.](#) (NASDAQ:AVGO) today announced the highest performing router in the industry— Jericho2c+. An industry first, the Jericho2c+ chip provides 14.4 terabits per second of advanced routing capabilities and the best power efficiency in the market. A global technology leader, Broadcom continues to innovate on its high-end switching and routing silicon portfolio with this new 7nm router chip, integrating security at line rate on all network ports.

Purpose built to minimize the power per terabit of bandwidth in modular chassis and disaggregated distributed system, Jericho2c+ enables a 36 Port 400GbE line-card with integrated security with only two chips. This innovative new solution significantly reduces footprint, complexity, power and costs compared to alternative solutions that require a far larger number of devices.

"Broadcom's field proven Jericho, Tomahawk and Trident family of products are setting the pace for the industry in scalability, port density and power efficiency," said Ram Velaga, senior vice president and general manager, Core Switching Group, Broadcom. "We are excited to be working with major O.E.M. and software partners to deliver Data Center Interconnect, edge routing and core routing systems, scaling to well over 200 terabits per second, for deployments in mega scale data centers and service provider networks."

Core and edge routing solutions rely on flexible packet processing and feature concurrency. The Jericho2c+ programmable pipe, large-scale forwarding databases and future-proofing matrix of programmable elements, provide a set of capabilities that addresses the most challenging routing requirements. Featuring a high integration level, Jericho2c+ improves port density, increases subscribers scale, reduces power per bit, and reduces the total cost of ownership— thus making it the building block of choice for future routing networks.

A growing requirement of hyperscalers is to secure all off-premise connectivity, which requires dedicated Media Access Control security (MACSec) components. When combining security with the ongoing migration to 400GE links, the hyperscalers face the tough challenge of increased power consumption. Jericho2c+ addresses this challenge with integrated line-rate MACSec on all network interfaces, making it the ideal solution for data center interconnect, metro and core switches.

"In the past, router vendors had to choose between a flexible pipe with feature concurrency versus power efficient high-bandwidth devices," said Bob Wheeler, principal analyst, The Linley Group. "Jericho2 disrupted the routing market by providing full routing capabilities without compromising performance. Jericho2c+ takes bandwidth, integration, and power efficiency to the next level, while adding line-rate security."

Broadcom is committed to supporting a broad software ecosystem on top of Jericho2c+, including OEM's and key Open Source initiatives. Broadcom has worked with its partners to enable SONiC support on 400G Jericho2c+ VOQ chassis-based systems.

Jericho2c+ and Broadcom's Ramon fabric element empower the industry's largest scale routing and switching solutions, with a combination of rich features and unmatched power efficiency, seamlessly integrating into existing Jericho2 and Ramon-based solutions, and significantly reducing time to market for large scale 400GE systems.

StrataDNX Jericho2c+ Series Key Benefits:

- Up to 14.4Tb/s switching and routing capacity per device
- Up to 18,432 x 400G ports in single router of Distributed Disaggregated Chassis (DDC)
- Line rate MACSec and IPSec support over all network ports with flexible encapsulation scheme to enable a variety of secure tunneling options
- Implemented with unparallel power efficiency using a 7nm die
- Future-proofing via flexible and extensible Elastic Pipe™
- Carrier grade Hierarchical Traffic Manager with HBM-based deep packet buffer
- PP tables scale, counters and ACLs expansion via KBP
- SONiC support for fixed and modular systems

Availability

Broadcom is now sampling Jericho2c+ router chips to qualified customers. For more information on [Jericho2c+](#) and all Broadcom products and solutions please click [here](#).

About Broadcom

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.

Broadcom, the pulse logo, StrataDNX and Jericho are among the trademarks of Broadcom. The term "Broadcom" refers to Broadcom Inc., and/or its subsidiaries. Other trademarks are the property of their respective owners.

Press Contact:

Jon Piazza

Quote Sheet:

Anshul Sadana, Chief Operating Officer & Senior Vice President, Arista

"The Arista 7800R3 and 7280R3 Series running EOS[®] provide a broad range of solutions for data center switch and router environments, powered by multiple generations of the Broadcom Jericho architecture. Jericho2c+ delivers an impressive 14.4T of routing/switching bandwidth in a highly-integrated, 7nm power-efficient design. This unprecedented level of integration and bandwidth enables our customers to seamlessly scale their network infrastructure, from 100GE to 400GE, to meet future requirements for exponential bandwidth growth with power-optimized 400GE ports."

Devesh Garg, CEO, Arrcus Inc.

"Arrcus is delivering hyperscale performance in volume deployments ranging from the data centers, to the backbone, and to the edge. These customers deploy a micro-services based operating system solution, ArcOS, on both the StrataXGS and StrataDNX silicon-based platforms from Broadcom. We are excited to see the addition of Jericho2c+, which expands and further improves the port density, security, and power efficiency of our solutions."

Mike Satterlee, Vice President, Network Infrastructure and Services, AT&T

"AT&T's new core and edge networks are transitioning to a DDC topology, powered by Jericho2. The addition of Jericho2c+ will enable AT&T to further scale out our DDC network infrastructure in a seamless manner. We can add highly secure connectivity in selected locations, while keeping the same power envelope."

Mike Nielsen, Vice President, Packet Networking, Ciena

"We are pleased to see Broadcom sampling the industry's highest performance routing silicon Jericho2c+. The power efficiency and port density superiority of merchant silicon routers will help service providers improve cost efficiencies and speed the delivery of new, innovative services."

Kevin Wollenweber, VP of Networking, Mass Scale Infrastructure, Cisco

"We continue to see broad adoption of the Cisco's NCS5500 router series as more customers demand enhanced scale and capabilities to keep up with network demands. Broadcom's Jericho2c+ together with our market-leading IOS-XR software will enable further expansion of our routing portfolio."

Jeff Chen, General Manager, DNI BU, DELTA Networks Inc.

"Jericho2c+ drives the white box eco-system forward to high-density 400GE solutions. Our white box routers, coupled with third-party software will continue to revolutionize the way networks are built."

Ido Susan, CEO, DriveNets

"DriveNets Network Cloud is the world's highest-scale and first commercially deployed software-based networking solution. It supports 200Tbps of Core Routing over white boxes that are based on the Jericho2 router device. With Jericho2c+ DriveNets will triple the routing scale and add advanced security protocols making our Distributed Disaggregated Chassis (DDC) solution the largest core and edge router in the industry, deployed, by leading Service Providers and hyperscale cloud providers."

Jeff Catlin, VP of Technology, Edgecore Networks

"Open disaggregated routers enable network operators to build scalable and adaptable systems for core, aggregation, and access networks. With its unprecedented 14.4Tbps capacity and the most efficient cost and power profile available, Broadcom's Jericho2c+ and the companion Ramon device will further disrupt the market."

Amin Vahdat, Fellow and VP, Systems Infrastructure, Google Cloud

"We are pleased to collaborate with Broadcom to bring Jericho2c+ to market, delivering new power efficiencies and advanced security capabilities to today's scalable networks."

Yan Qiao, GM, Switching Product Line, H3C

"Back in January 2020, the new H3C S12500R DCI routing switch, based on Broadcom's Jericho2 switch chip, passed the first 400G, high port density combined with full line rate benchmark. Now with the Jericho2c+ launch, we are seeing higher 400G density, lower power consumption, and an advanced SRv6 solution for the hyperscale data center— all incredible value adds for our customers. Further, our installed-based utilizing the new H3C S12500 platform, really appreciates Jericho2/ Jericho2c+'s backwards compatibility as it provides a seamless upgrade and investment protection."

Satinder Sethi, General Manager Infrastructure Services, IBM Cloud

"As enterprises increasingly adopt hybrid cloud, they're relying on the flexibility of an open and secure cloud to support their mission critical workloads at all times. To keep up with the increased demand for performance and security at scale, as networks become more and more sophisticated, there is a growing need for deep operational instrumentation for every element of the network. Broadcom's Jericho2c+ with its comprehensive telemetry infrastructure, enables the next generation network platform for demanding enterprise applications, data and AI workloads."

Brendan Gibbs, Vice President, Juniper Networks

"We are pleased to see Broadcom's Jericho2c+ sampling. With 14.4Tbps per device, Jericho2c+ strengthens our offering for metro Ethernet aggregation networks."

Albert Greenberg, Corporate Vice President, Microsoft

"Broadcom has been a key partner in the SONiC community. Broadcom's collaboration to drive the VOQ Chassis work in SONiC and SAI are an important example of this commitment. With a 14.4T density of switching/routing, a power optimized 7nm design and full integration of line rate MACSEC, Jericho2C+ supports the rapid deployment of SONiC capable 400GE secure chassis."

Liu Zhongdong, President and CEO, Ruijie Networks

"Broadcom's Jericho2c+'s industry-leading architecture provides the needed scale, port, density and security integration to enable a diverse array of

leading DCI, core, spine, and leaf switches that our customers demand. Leveraging an unprecedented integration, Jericho2c+ empowers us to build feature rich, power efficient DC solutions that will further extend our competitive edge.”

Teruyuki Oya, Vice President, IP & Transport Technology Division, SoftBank Corp.

“Broadcom’s Jericho2c+’s availability further drives routing solutions to higher-scale and greater power efficiency. The feature concurrency, combined with deep buffering, enables our network to quickly advance in scale, and serve our customers’ growing bandwidth requirements.”

Vincent Ho, CEO, UfiSpace

“UfiSpace is fully focused on providing disaggregated routers for the carrier market, based on the Broadcom Jericho and Qumran product lines. Our Jericho2 based NCP, enables scalable Core and Edge Routing. Our next generation 28.8Tbps NCP Router based on Jericho2c+ will sample soon, tripling the size of our DDC solution to 700Tbps.”



Source: Broadcom Inc.