

Broadcom and Arista Deliver Industry-First Open, Performance-Optimized, End-to-End RDMA Over Converged Ethernet (RoCE) Solution

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Connected by Broadcom, RoCE-Optimized Systems Enable Cloud, HPC and AI/ML Providers to Deploy Industry-Leading Ultra-Low Latency Ethernet

SAN JOSE, Calif., Oct. 11, 2022 (GLOBE NEWSWIRE) -- <u>Broadcom Inc.</u> (NASDAQ: AVGO) today announced the availability of the industry's first open end-to-end networking solution optimized for Remote Direct Memory Access (RDMA) over Converged Ethernet. Hyperscaler and enterprise data center operators can now deploy fully optimized systems, connected by Broadcom, using open-standard RDMA. Jointly integrated by Ethernet market leaders Broadcom and Arista, this end-to-end solution features Broadcom's Ethernet NIC and switch technology.

The Broadcom and Arista RoCE solution simplifies the deployment of RoCE in the data center, by utilizing an end-to-end open congestion control algorithm to deliver the industry's lowest latency at scale. The whole-fabric optimization, covering NIC and switches, contributes to scale and performance improvements over solutions that rely exclusively on the NIC to manage network behavior.

Tests conducted by both companies demonstrate improvement in congestion control latency over existing solutions as well as improved bandwidth and collective completion times. In addition, Broadcom and Arista have collaborated to provide comprehensive documentation to simplify RoCE deployment, management, and increase performance in the data center.

"Knowing and delivering what the market needs is critical to Arista. High-performance RoCE networking is key to our customers in a wide range of verticals such as the cloud, machine learning, AI, storage, and HPC. Our mission to offer market-leading, scalable, Ethernet networking solutions to expand the RDMA ecosystem and simplify deployments is essential for our customers," said Narayanan Surynarayanan, director, systems engineering, Arista. "By combining Broadcom's NIC with Arista switches, customers get turnkey, performance-optimized, end-to-end solutions for RoCE networking."

"RDMA has become a must-have technology in the data center for Ethernet NIC and switches. Broadcom has been diligently working with Arista, a networking industry leader, to expand the hardware ecosystem," said Jas Tremblay, vice president and general manager of the Data Center Solutions Group at Broadcom. "This long-standing collaboration marks a critical turning point for the networking industry by making RoCE a multi-vendor, competitive technology that will benefit a broad range of customers and applications. We are deeply committed to developing open standards RDMA for low-latency, high-speed data transfers, and working with Arista ensures we deliver the best technology to customers, the right way."

The End-to-End Solutions Available Today Include:

- Broadcom Family of Ethernet NICs Include:
 - o OCP 3.0 adapters with 2x100G, 1x200G, 1x100G, and 4x25G Ethernet
 - o PCIe adapters with 2x100G, 1x200G, and 4x25G Ethernet
 - o Linux, VMware ESX, and Windows drivers
 - o Industry's lowest power solution
- Arista Switches Include:
 - o 7060X4 Series switch based on Broadcom's Tomahawk ® 3 ASIC
 - o 7280R3 Series based on Broadcom's Jericho 2 ASIC
 - o 7800R3 Series modular switch based on Broadcom's Jericho 2 ASIC
 - o 7050X3 Series based on Broadcom's Trident 3 ASIC
- Broadcom and Arista RoCE RDMA Solutions Documentation Include:
 - Introduction to Congestion Control for RoCE White Paper
 - o Arista/ Broadcom RoCE RDMA Solutions Data Sheet
 - o Arista/ Broadcom RoCE RDMA Solution: Deployment and Configuration Guide
 - RDMA Over Converged Ethernet (RoCE) Configuration Guide

"As infrastructure becomes increasingly connectivity-centric, advances in networking technology become more important. RDMA over Converged Ethernet supports the requirements of demanding application environments for high-bandwidth and low-latency. The collaboration between Arista and Broadcom makes RoCE even more accessible and underscores the fact that hardware still matters," said Dave Vellante, chief analyst, Wikibon Research.

"We are pleased to see Broadcom and Arista collaborate on the evolution of RoCE developing high-performance network fabrics with open interfaces. The continued commitment of our partners ensures the OCP community has multiple viable technologies for the future of the data center," said Petr Lapukhov, network engineer, Meta.

Broadcom and Arista are committed to ongoing innovation and will continue to add more products to this solution in the future. To learn more about this solution, please view the Broadcom configuration guide and whitepaper and the Arista data sheet and deployment guide.

About Broadcom

Broadcom Inc. (NASDAQ: AVGO), a Delaware corporation headquartered in San Jose, CA, 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 https://www.broadcom.com.

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