Photo Release -- Avago Ships Next-Gen Express Fabric Switch Technology, Converges In-Rack Server, Storage, and Networks on PCIe

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PEX9700 Series Switch Chips Offer Industry-First Suite of Features That Dramatically Improve Performance While Reducing Power Consumption and Cost by Up to 50% for Most Demanding Hyper-Converged, NVMe, and Rack Scale Systems

SAN JOSE, Calif. and SINGAPORE, May 12, 2015 (GLOBE NEWSWIRE) -- Avago Technologies (Nasdaq:AVGO) today announced full production of its PEX9700 Series of 3rd generation switches that enable the convergence of servers, storage, and network devices through PCIe. With an industry-first suite of key new features that make up the core of Avago ExpressFabric® technology, the PEX9700 series of switches are designed for the most demanding data center environments. The PEX9700 series of managed PCIe switches simplify connectivity of data center systems and delivers the highest PCIe switching performance available inside the rack, reducing both cost and power consumption up to 50-percent when compared with traditional connectivity platforms.

A photo accompanying this release is available at http://www.globenewswire.com/newsroom/prs/?pkgid=32854

Avago PEX9700 Series of PCIe Switch Chips
Avago debuted its PEX9700 Series of PCIe switch chips with ExpressFabric technology, enabling faster and more efficient communication within data centers.

To meet the needs of hyperscale and data-intensive applications, data centers need to manage costs and power consumption while maximizing performance. While PCIe is the ubiquitous interconnect for internal devices, external device connectivity typically requires using other architectures. This wastes power, reduces performance, and increases costs. To eliminate this waste, Avago offers the next generation of switches featuring the industry leading PEX9700 series to directly connect in-rack devices using PCIe. Devices within a hyperscale system, NVMe enclosure, and rack-scale-based subsystems can now communicate directly through the same high-performance PCIe fabric, turning those devices into a single high-performance, high-capacity compute system.

The PEX9700 series of switches offer several key new switching features including:

- Shared I/O - Enables endpoints to be shared among multiple hosts to maximize system resource efficiency and reduce cost and power
- Tunneled Windows Connection – Interconnect up to 24 (+1 management host) nodes on a single chip or cascade multiple chips to connect up to 72 nodes with no performance loss
- Embedded DMA Engines – Equips each port with a NIC-DMA engine that enables efficient data transfers between multiple hosts
- Flexible Port Configuration – Allows up to 23 endpoints to be combined with ports as wide as 16 lanes, providing nearly 16GB/s of bandwidth on each link
- Downstream Port Containment – Isolates errors in any endpoint from bringing down the entire system
- Dedicated Port Management - Enables software control of switch features for customized implementations using Avago-developed software modules

"PCIe is fundamental to next-generation data centers to manage the growth and complexity of data traffic," said Tom Swinford, senior vice president and general manager, Data Center Solutions Group at Avago. "With PCIe technology at the core of nearly every product in the data center, fabric convergence within the rack using Avago ExpressFabric is a powerful approach for intra-rack connectivity to enable powerful performance and scaling of systems."

With PCIe performance of up to 1.5Tb/s through 97 lanes in full-duplex mode, the PEX9700 series of switches are a 3rd generation platform based on 12 years of field-proven deployments. As the worldwide leader in PCIe switching technology, with over 100 million ports shipped, Avago is delivering technology years ahead of the competition.

Supporting Quotes

"Huawei NÜWA All-In-One storage and analytics solution addresses the need for hyper-converged solutions that can deliver high performance for easily scalable big data analytics environments," Dr. Masood Mortazavi, distinguished engineer and senior director of the IT Research Department at Huawei R&D USA. "The Avago ExpressFabric platform for PCIe connectivity maximizes the efficiency and performance of this converged system, enabling Huawei's NÜWA solution to scale to the diverse storage and compute requirements of customers' most demanding applications."

"SanDisk SSDs and PCIe solutions working in conjunction with Avago's PCIe-based Express Fabric switch technology deliver unprecedented levels of performance and system architecture flexibility, which sets the stage for Rack Scale Architectures," said Rob Ober, senior fellow, Enterprise Solutions, SanDisk. "By removing traditional switching I/O bottlenecks, as well as adding technologies like NVMe to the data center, overall system aggregation and performance can scale significantly."

"As application components become increasingly stateless and horizontally scalable, datacenter infrastructures are converging rapidly. Avago is taking an innovative approach to PCIe-based connectivity of host devices and endpoints, one that seeks to provide compatibility for a wide range of

enterprise applications," said Matt Eastwood, senior vice president, Enterprise Infrastructure and Datacenter at IDC. "The technology offers designers and system architects an attractive option for high-performance intra-rack connectivity."

Availability

The PEX9700 Series of ExpressFabric products are now shipping in full production to leading OEMs with seven new models ranging from 12-Lanes/5-Ports to 97-Lanes/25-Ports. The entire platform is compliant with the PCI Express Base Specification r3.0 standard. Avago is the worldwide market leader in 3rd-generation PCIe products and is charting a leadership role in PCIe Gen4 solutions with development already in progress. For more information, visit the ExpressFabric website.

View the PEX9700 switch video that introduces this exciting new technology by Avago.

About Avago Technologies

Avago Technologies is a leading designer, developer and global supplier of a broad range of analog, digital, mixed signal and optoelectronics components and subsystems with a focus in III-V compound and CMOS based semiconductor design and processing. Avago's extensive product portfolio serves four primary target markets: wireless communications, enterprise storage, wired infrastructure, and industrial and other.

For more information, visit Avago's website: www.avagotech.com.

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CONTACT: Press Contact:
David Szabados
Corporate Communications
david.szabados@avagotech.com
Telephone: 1-408-433-7848

company logo