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Microchip Technology, in Collaboration With Micron Technology, Demonstrates High-Performance PCIe® Gen 6 Storage Architecture for AI and Data Center Infrastructure

Switchtec™ PCIe Switches and Micron® 9650 NVMe® solid state drives (SSDs) leverage next generation interface technology to deliver increased bandwidth, low latency, and scalable storage connectivity

CHANDLER, Ariz., Aug. 04, 2026 (GLOBE NEWSWIRE) -- Microchip Technology (**Nasdaq: MCHP**) today announced a demonstration showcasing an end-to-end PCIe® Gen 6 storage architecture, combining Microchip's Switchtec™ PCIe Gen 6 switches with high-performance Micron 9650 NVMe® solid state drives (SSDs). The demonstration highlights the role of next-generation PCIe technology in enabling higher data throughput, reduced latency and scalable connectivity for AI, high-performance computing (HPC) and cloud data center workloads.

At the 2026 Future of Memory and Storage (FMS) Conference, the demonstration features a Microchip Switchtec Gen 6 PCIe fanout switch acting as a high-bandwidth, low-latency interconnect between host processors and multiple Micron 9650 SSDs enabling the drives to operate at the full potential of Gen 6 speed. The architecture supports composable and disaggregated system designs, allowing data center architects to scale storage resources efficiently while maintaining predictable performance.

“Advancing data center performance is not solved by any single component and our work with Micron highlights the importance of taking a cohesive approach,” said Brian McCarron, corporate vice president and GM of Microchip's data center solutions business unit. “We’re bringing together complementary strengths in switching and storage to demonstrate how a well-aligned ecosystem can enable scalable, high-bandwidth architectures for next-generation AI and cloud platforms.”

As AI models grow in size and complexity, data centers must move increasingly large volumes of data across compute, memory and storage resources. PCIe 6.0 helps address this challenge by doubling PCIe 5.0 bandwidth to 64 GT/s (giga transfers per second) per lane, delivering the sustained throughput required for demanding AI workloads.

“AI infrastructure is entering a new era in which storage performance and ecosystem interoperability must advance in lockstep,” said Larry Hart, senior director of solutions marketing for Micron's Core Data Center Business Unit. “Together, the Micron 9650 SSD, the industry's first mass-produced PCIe Gen 6 SSD, and Microchip's Switchtec PCIe Gen 6

switching technology demonstrate how a scalable storage architecture can help data centers achieve higher throughput, lower latency and more efficient data movement for next-generation AI, HPC and cloud workloads.”

Microchip's Switchtec Gen 6 PCIe switches are built on 3 nm process technology and support high lane counts, advanced error containment, comprehensive diagnostics and multicast functionality that enables efficient one-to-many data distribution across devices within a PCIe domain. The switches enable high-speed connectivity between CPUs, GPUs, SoCs, AI accelerators and storage devices while helping optimize power consumption in demanding computing environments. These capabilities help ensure reliable data movement and system resilience in AI and cloud infrastructure. To help protect system integrity, the switches incorporate a hardware root of trust and secure boot architecture supported by post-quantum-safe cryptographic algorithms that meet CNSA 2.0 security standards.

Micron 9650 PCIe Gen 6 NVMe SSDs are designed to deliver exceptional throughput, IOPS and latency characteristics required for data-intensive workloads such as AI training, real-time analytics and large-scale databases. By combining Micron's storage technology with Microchip's switching capability, the solution demonstrates a balanced, high-performance storage fabric optimized for next-generation platforms. Visit the website to learn more about Microchip's full portfolio of [data center solutions](#).

Resources

High-res images available through Flickr or editorial contact (feel free to publish):

- Application image: <https://www.flickr.com/gp/microchiptechnology/Hogy7Pk3z4>

About Microchip Technology:

Microchip Technology Inc. is a broadline supplier of semiconductors committed to making innovative design easier through total system solutions that address critical challenges at the intersection of emerging technologies and durable end markets. Its easy-to-use development tools and comprehensive product portfolio supports customers throughout the design process, from concept to completion. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support and delivers solutions across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. For more information, visit the Microchip website at www.microchip.com.

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