



Astera Labs Introduces New Portfolio of Fabric Switches Purpose-Built for AI Infrastructure at Cloud-Scale

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Shipping in pre-production quantities, Scorpio Smart Fabric Switches deliver maximum system utilization and uptime for scale-out PCIe 6 connectivity and scale-up GPU clustering in AI servers

SANTA CLARA, Calif.--(BUSINESS WIRE)--Oct. 8, 2024-- Astera Labs, Inc. (Nasdaq: ALAB), a global leader in semiconductor-based connectivity solutions for AI and cloud infrastructure, today announced a new portfolio of fabric switches, including the industry's first PCIe® 6 switch, built from the ground up for demanding AI workloads in accelerated computing platforms deployed at cloud-scale. The Scorpio Smart Fabric Switch portfolio is optimized for AI dataflows to deliver maximum predictable performance per watt, high reliability, easy cloud-scale deployment, reduced time-to-market, and lower total cost of ownership.

The Scorpio Smart Fabric Switch portfolio features two application-specific product lines with a multi-generational roadmap:

- **Scorpio P-Series** for GPU-to-CPU/NIC/SSD PCIe 6 connectivity – architected to support mixed traffic head-node connectivity across a diverse ecosystem of PCIe hosts and endpoints.
- **Scorpio X-Series** for back-end GPU clustering – architected to deliver the highest back-end GPU-to-GPU bandwidth with platform-specific customization.

Jitendra Mohan, Chief Executive Officer, Astera Labs, said, “Hyperscalers are deploying highly specialized AI platforms at an unprecedented pace, scale, and complexity. Our new Scorpio Smart Fabric Switch portfolio delivers maximum system utilization and uptime for two specific AI use cases – scale-out PCIe connectivity with Scorpio P-Series and back-end, scale-up GPU clustering with Scorpio X-Series. Scorpio offers energy efficient fabric solutions with predictable, secure, and high-performance data flows and extensive fleet management capabilities for accelerated AI infrastructure deployments at cloud-scale.”

Patrick Moorhead, Founder, Chief Executive Officer, and Chief Analyst, Moor Insights & Strategy, said, “Hyperscalers and AI platform providers developing systems for training and inferencing workloads have traditionally used PCIe switches that were initially designed for general purpose and storage applications. These switches can be complex, consume high power, and require longer system development cycles that make them challenging for AI platforms. With its introduction of the Scorpio Smart Fabric Switch portfolio, Astera Labs is focused on the industry's need for a more performant, efficient fabric solution that's purpose-built to meet the specific requirements of AI training and inference workloads in the cloud.”

Scorpio Smart Fabric Switches expand Astera Labs' Intelligent Connectivity Platform and integrates with the COnnectivity System Management and Optimization Software (COSMOS) suite to deliver a smart, customizable connectivity backbone with unprecedented data center observability, enhanced security, and extensive fleet management capabilities. Scorpio enables unmatched insights into the state and health of accelerated computing platforms to ensure maximum uptime and availability.

Scorpio Smart Fabric Switches are rigorously tested with leading PCIe hosts and endpoints in Astera Labs' Cloud-Scale Interop Lab and in customer platforms. Scorpio is now shipping in pre-production quantities for head-node PCIe 6 connectivity and ready to propel AI platform deployments utilizing industry-leading GPUs with reliable plug-and-play interoperability, advanced diagnostics and telemetry, and comprehensive design collateral.

Brian Kelleher, Senior Vice President of GPU Engineering, NVIDIA, said, “AI infrastructure requires the right balance of interconnect performance, efficiency and capabilities to enable accelerated computing for AI workloads at scale. The new Scorpio fabric switch portfolio can support NVIDIA accelerated AI infrastructure deployments across a wide variety of AI and HPC workloads.”

Resources:

- Webpage: [Scorpio Smart Fabric Switches](#)
- Blog: [Driving AI and Cloud Innovation: How Astera Labs is Expanding its Market Opportunity](#)
- Blog: [Overcome Next-Gen AI Infrastructure Challenges with Scorpio Smart Fabric Switches](#)
- White Paper: [How Your Hyperscale Data Center Can Overcome the Challenges of Next-Gen AI Infrastructure with Smart Fabric Switches](#)
- Video: [Introduction to Scorpio](#)
- Video: [Scorpio First Look Demo](#)
- Video: [Moor Insights: Scaling AI with Astera Labs' Smart Fabric Switch Portfolio](#)
- Video: [Astera Labs' Vision for the AI Era](#)

Visit Astera Labs at OCP 2024, October 15-17, San Jose Convention Center

Astera Labs will demonstrate its new Scorpio Smart Fabric Switch portfolio in Booth B13. [Schedule to meet](#) with Astera Labs experts and learn how its solutions enable critical connectivity for AI and cloud infrastructure.

About Astera Labs

Astera Labs is a global leader in purpose-built connectivity solutions that unlock the full potential of AI and cloud infrastructure. Our Intelligent Connectivity Platform integrates PCIe®, CXL®, and Ethernet semiconductor-based solutions and the COSMOS software suite of system management and optimization tools to deliver a software-defined architecture that is both scalable and customizable. Inspired by trusted relationships with hyperscalers and the data center ecosystem, we are an innovation leader delivering products that are flexible and interoperable. Discover how we are transforming modern data-driven applications at www.asteralabs.com.

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Joe Balich

Joe.balich@asteralabs.com

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