Serial Cables Announces 'Hydra,' the Industry’s First Gen6 8-Bay JBOF for PCIe, NVMe, and CXL Validation

Serial Cables launches the first Gen6 8-bay JBOF for PCIe, NVMe & CXL validation, offering advanced power, airflow & telemetry control for Gen6 labs.

Serial Cables Hydra is a Gen6 JBOF solution for PCIe, NVMe, and CXL testing. It delivers a compact 8 bay enclosure designed specifically for validation workflows. in one clean testing toolchain agnostic, automated system

ENGLEWOOD, CO, UNITED STATES, November 6, 2025 /EINPresswire.com/ -- Serial Cables, a leading provider of high-performance interconnect solutions for PCIe and CXL development, today announced Hydra, the industry’s first 8-bay Gen6 JBOF platform engineered specifically for PCIe, NVMe, and CXL validation. Hydra will be available beginning November 16th, 2025.

For hardware validation teams working with Gen6 PCIe SSDs and CXL devices, traditional test setups have been makeshift at best, often relying on open benches, loose cables, and external fans. These environments introduce instability, increase thermal variance, and make repeatable testing difficult.

Hydra changes that. With advanced airflow control, precise per-slot power management, and full sideband signaling integration (I^2C with MCTP, and I^3C MCP), Hydra enables structured testing of Gen6 devices in a compact, modular enclosure.

Hydra features a passive 8-bay Gen6 x8 MCIO backplane with individual paddle card slots, providing direct, low loss connectivity to each drive. This eliminates many of the signal integrity (SI) challenges common with traditional backplanes, especially at 64 GT/s.

The design supports both standard paddle cards and advanced configurations, including Quarch Power Analysis Modules (PAM) and upcoming Quarch Breaker integrations, allowing detailed

telemetry and power control per slot.

Hydra ships with a Python written CLI, GUI, and API access to streamline lab workflows and integrate with any testing tool-chain.

Software Capabilities:
• Real-time monitoring of SSD power, thermals, and link behavior
• Direct control of NVMe-MI and MCTP commands via CLI or script
• Automated test sequencing across all eight drives
• Output telemetry for regression, compliance, or debug tracking
• API-level integration with third-party automation platforms

Hydra's open 8 bay chassis supports all EDSFF drive formats (E3.S 2T, E3.L, and E3.L 2T) with a modular paddle card design and optional Quarch PAM and Breaker integration for precise, low loss Gen6 validation.

PCIe Gen6 JBOF Features:
• 8-bay passive Gen6 x8 EDSFF JBOF for PCIe, NVMe, and CXL
• Paddle card architecture eliminates Gen6 backplane limitations

> Hydra deeply it integrates into modern validation workflows: It's a platform that speaks NVMe and sideband natively for faster & more reliable development."
>
> *Paul Mutschler, CEO at Serial Cables.*

• Multiple paddle card options (Standard connectivity, Standard + Quarch PAM , Standard + Quarch Breaker (Q1 2026))
• EDSFF form factors supported: E3.S 2T, E3.L, E3.L 2T
• 500W PSU with staggered power-up sequencing
• Dual 36CFM fans with CLI-based RPM control
• Front panel LEDs for slot presence, activity, error, and pass/fail
• 8 x8 MCIO connectors for clean slot-to-slot cabling
• Firmware-updatable mCPU controller with CLI interface
• Per-slot telemetry and controls including: Power on/off, reset (PERST#), disable , Voltage, temperature, and current monitoring, Link width and speed negotiation, SSD dual-port and power draw tracking, Full sideband support: I^2C (with MCTP) and I^3C MCP

Serial Cables Hydra will be available beginning November 16th, 2025. For demo requests, datasheets, or early access program information, please contact sales@serialcables.com.

ABOUT SERIAL CABLES
Serial Cables is a trusted provider of PCIe and CXL validation hardware. The company is known

for early-access innovation, responsive support, and purpose-built tools for hyperscale, enterprise storage, and silicon validation environments. Serial Cables focuses on short lead times, collaborative engineering, and delivering proven hardware that accelerates time-to-market.

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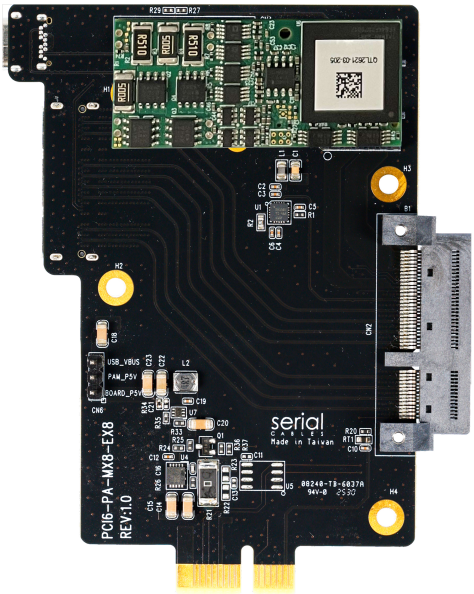

Hydra paddle card with mezzanine module enabling Quarch PAM or Breaker integration for detailed per-slot power analysis, telemetry, and controlled Gen6 validation.