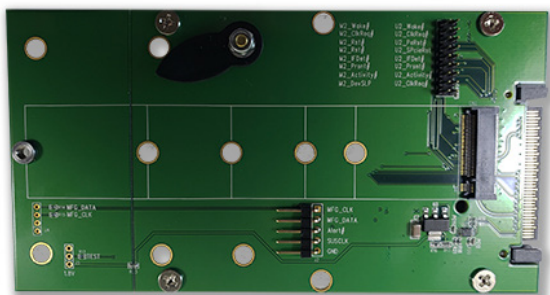


Multi-protocol U.2 SSD Test System

The Serial Cables Multi-protocol (SATA/SAS & PCIe/NVMe) Drive Test system is composed of the base 8, 16 or 24 slot test system configurations and for PCIe/NVMe an additional PCIe switch enclosure is required.

The switch enclosure contains two Microsemi PCIe Gen3 PFX8535 switches. The SwitchTec fanout switch is PCIe Base 3.1 Spec-compliant with an integrated hot and surprise – plug controller on each port. Each of these controllers has less than 170 nanoseconds of bidirectional non-blocking cut-through latency. Two x16 input channels per/switch (MiniSAS HD) support PCIe Gen3 x32 256GT/s bandwidth. Each of the PCIe Gen3 x4 slots can be split into 1x4 or 2x2 links for a single port 1x4 or dual port 2x2 PCIe/NVMe drives support.

The drive enclosure support can support 8, 16 or 24 drive slots, each implementing red, blue and green LEDs for testing status indication. The drive enclosure can be connected to the switch enclosure via internal MiniSAS HD (SFF8643) cables for PCIe/NVMe drive testing or connected to a SAS Host Bus Adapter for SAS/SATA drive testing up to 12Gb/s speeds. Additionally, each power rail on each drive slot can be powered on or off programmatically and voltage/current can be adjusted/read back programmatically as well. Also featured is a tray-less mechanical design with hot-plug support for more convenient drive insertion/removal.



24 slot Multi-protocol 2.5" drive enclosure (front view)



PCIe/NVMe Switch Enclosure (rear view)

Features:

- Adjustable input voltage, 12v +/- 10%, 5v +/- 10%
- Individual drive voltage, current and power measurements on 12v/5v and 3.3v rails
- Fully supported drive hot-swapping
- Supports single x4 and dual port x2 PCIe/NVMe drives
- Drive insertion/removal detection and programmatic drive power cycle
- Supports PCIe/NVMe drive SMBus information gathering
- CLI interface for automation
- Drive enclosure configurations: 1U 8-bay, 2U 16-bay and 3U 24-bay

Specifications

Model	US-PM425T (Switch Enclosure)
PCIe Switch (per board)	Microsemi Switchtec PFX PM8535 80-Lane PCI Express Gen 3 Switch
Form Factor	EIA-310D 1U form factor
Power Supply	800W 80 PLUS Titanium power supply
I/O Capability (per board)	Upstream bandwidth: PCIe Gen3 x 32, 256 GT/s Downstream bandwidth: Twelve SFF8643 connectors
Auxiliary I/O (per board)	Type B USB port for terminal, RJ45 Ethernet 10/100 port, Mute button
System Alarm	Buzzer beeping for critical events (FAN, PSU, over voltages and temperatures)

Model	US-PM425T (Drive Enclosure-3U)
Real I/O	24x SFF8643 connectors for PCIe/NVMe drives testing 6x SFF8643 connectors for SAS/SATA drives testing 6x Type B USB connectors for CLI control 12x EPS 12Volts connectors 6x Mute, F/W upgrading, and operation mode select button
Form Factor	EIA-310D 3U form factor
Dimensions	Standard 19" Rackmount enclosure 480mm (width) x 88mm (height) x 155mm (depth)
LED Indicators (per Slot)	DUT under test (Green), Pass (Blue), Fail (Red) LEDs (All the behaviors of LED are user configurable)
System Cooling	24x40mm (W) x 40mm (H) x 20mm (D) FANs
Warranty	1 year for both of switch and drive enclosures

Adapters available for converting PCIe/NVMe U.2 to M.2 (40mm – 110mm) upon request.

Visit Serial Cables online to view
the most current product information.

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