eBox 4 Pro Expansion Solutions

Features

- PCIe 5.0 x16 architecture
- Rugged frame design
- Dual power up to 4800W
- 4U 19” rack
- Up to 9 PCIe 5.0 x16 peripherals
- Management CPU
- Highly configurable

Powerful. Scalable. Ready for What’s Next.

The eBox 4 Pro Expansion Chassis is purpose-built to support the latest PCIe 5.0 peripherals, offering up to 4800W of power. Engineered around the Microchip Switchtec® PCIe 5.0 PFX switch, it ensures ultra-fast, reliable communication.

Designed to support up to 9 PCIe 5.0 devices, this chassis delivers exceptional throughput, low-latency performance, and flexible expansion capabilities tailored for high-demand computing environments. With full PCIe 5.0 support, it ensures reliable, high-bandwidth connectivity for a wide range of components.

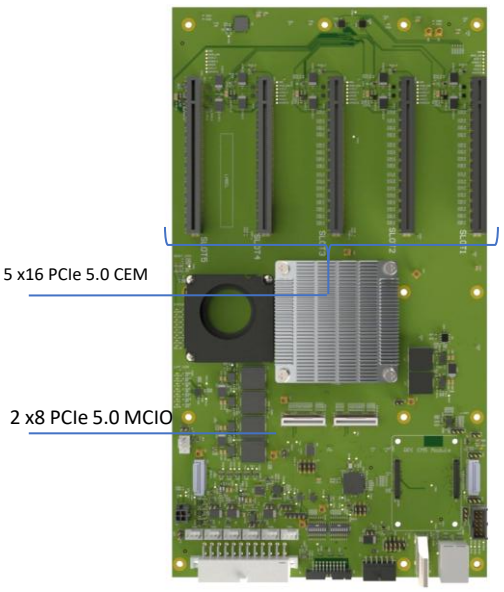
Ideal for AI model training, FPGA real-time data acquisition, and GPU-accelerated workloads, this platform offers an efficient solution for applications that require high-performance data processing. Its scalable architecture allows you to build and adapt your system, without compromising on speed or reliability.

Designed for flexibility

The eBox 4 Pro is built around the MXB585 platform, delivering exceptional flexibility in port configuration and system design. Powered by the Microchip Switchtec™ PFX 100xG5 PCIe switch, it provides transparent and advanced NTB (Non-Transparent Bridging) capabilities that enable seamless interconnection between multiple Root Complexes and peripheral devices within the same fabric.

When combined with the Dolphin eXpressWare software suite, the eBox 4 Pro becomes a foundational component for next-generation composable infrastructure. Leveraging **device lending** and **shared memory** technologies, it can operate either as a **dynamic resource pool** or as the central node in a high-performance PCIe cluster architecture.

This makes the eBox 4 Pro a powerful enabler for scalable, high-availability, and performance-driven computing environments.



Specifications preliminary

Mechanical Dimensions	4U * 19'' * 20''
Weight	18 kg
Cooling	Onboard fan controller - 3 x 120 x 38 mm deep fan for high power option
Power supply	- Balanced Dual AC 2400W CRPS with Max power 4800W (Redundant up to 2400W)
Backplane options	Single MXB585 - 1x single-width PCIe 5.0 x 16 FHFL Target / Uplink card - 4x dual-width PCIe 5.0 x16 FHFL Add-In cards Dual MXB585 in parallel - 2x single-width PCIe 5.0 x 16 FHFL upstream slot - 8x dual-width PCIe 5.0 x16 FHFL downstream slots Dual MXB585 interconnected - 1x single-width PCIe 5.0 x 16 FHFL upstream slot - 9x dual-width PCIe 5.0 x16 FHFL downstream slots
Management via Ethernet *to be released	Configuration setup and firmware upgrades Health parameter monitoring: - Temperature - Fan - Voltage - PCIe Error
PCIe version	Base Specification 5.0 Card Electromechanical Specification 5.0 CopprLink 1.0
Operating Environment	Operating Temperature: 0°C - 45°C (32°F - 113°F) Relative Humidity: 5% - 95% (non- condensing)
Regulatory approvals (pending)	CE Mark FCC Class A RoHS compliant UL94V-0 compliant KCC
Regulatory EMC and safety tests (pending)	EN 62368-1:2014 + A11:2017 EN 55032:2012 EN 55035:2017 EN 61000-3-2:2014 EN 61000-3-3:2013 47 CFR Part 15, Subpart B (Clause 15.107 and 15.109) in conjunction with ANSI C63.4:2014 CISPR 35:2016 Edition 1.0 (CISPR/I/412/CDV) Korean Harmonized standard, KN 35
PCIe 5.0 Dolphin cable	- up to 3 meters copper - up to 100 meters fiber