

eBox 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 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.

Highly configurable

The eBox Pro can be configured with active, passive, or a mix of both backplanes within the same unit. It also supports multiple uplinks or hot add and can be tailored to meet the unique demands of your application

Topology Examples

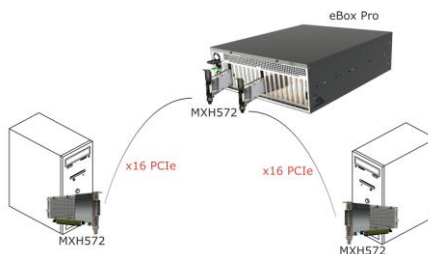
Single-Node expansion:

Cabled PCIe expansion systems with up to 9 IO devices.



Dual-Node expansion:

Each computer can access up to 4 IO device.



Specifications preliminary

Mechanical Dimensions	4U * 19" * 20"
Weight	15 kg
Cooling	Onboard fan controller <ul style="list-style-type: none">- 3 x 120 x 25 mm deep fan for low power option- 3 x 120 x 38 mm deep fan for high power option
Power options	Standard power: <ul style="list-style-type: none">- Balanced Dual AC 1200W CRPS with Max power 2400W (Redundant up to 1200W) High power: <ul style="list-style-type: none">- Balanced Dual AC 2400W with Max power 4800W (Redundant up to 2400W)
Backplane options	Single MXB585 <ul style="list-style-type: none">- 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 <ul style="list-style-type: none">- 2x single-width PCIe 5.0 x 16 FHFL upstream slot- 8x dual-width PCIe 5.0 x16 FHFL downstream slots Dual MXB585 interconnected <ul style="list-style-type: none">- 1x single-width PCIe 5.0 x 16 FHFL upstream slot- 9x dual-width PCIe 5.0 x16 FHFL downstream slots
Management via Ethernet <small>*to be released</small>	Configuration setup Health parameter monitoring: <ul style="list-style-type: none">- Temperature- Fan- Voltage- PCIe Error
PCIe version	Base Specification 5.0 Card Electromechanical Specification 5.0 CoprLink 1.0
Operating Environment	Operating Temperature: 0°C - 45°C (32°F - 113°F) Relative Humidity: 5% - 95% (non- condensing)
Regulatory approvals	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	<ul style="list-style-type: none">- up to 3 meters copper- up to 100 meters fiber

Ordering options

SKU	Description
MXE5603x	Single MXB585 standard power <ul style="list-style-type: none">- 1x single-width PCIe 5.0 x 16 FHFL upstream slot- 4x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 1200W AC power supply
MXE5613x	Dual MXB585 standard power <ul style="list-style-type: none">- 2x single-width PCIe 5.0 x 16 FHFL upstream slot- 8x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 1200W AC power supply
MXE5623x	Dual MXB585 with MCIO standard power <ul style="list-style-type: none">- 1x single-width PCIe 5.0 x 16 FHFL upstream slot- 9x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 1200W AC power supply
MXE5703x	Single MXB585 high power <ul style="list-style-type: none">- 1x single-width PCIe 5.0 x 16 FHFL upstream slot- 4x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 2400W AC power supply
MXE5713x	Dual MXB585 high power <ul style="list-style-type: none">- 2x single-width PCIe 5.0 x 16 FHFL upstream slot- 8x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 2400W AC power supply
MXE5723x	Dual MXB585 with MCIO high power <ul style="list-style-type: none">- 1x single-width PCIe 5.0 x 16 FHFL upstream slot- 9x dual-width PCIe 5.0 x16 FHFL downstream slots Dual 2400W AC power supply

x in SKU denotes dual uplinks selected from table below

For other configuration contact Dolphin sales at sales@dolphinics.com or your local representative..
The eBox Pro is highly configurable and flexible, not all combination are listed above.

Uplink card options (x)

Chassis SKU	Standalone adapter SKU	Description
x=0	-	No uplinks mounted in chassis
x=1	MXH532	Adapter card with 4 x SFF-8614 PCIe 5.0 x16
x=2	MXH572	Adapter card with 1 CDFP PCIe 5.0 x16
x=3	MXH542	Adapter card with Samtec Firefly™ and MPO connector PCIe 5.0 x16