MXB585 PCIe 5.0 Expansion Backplane



Features

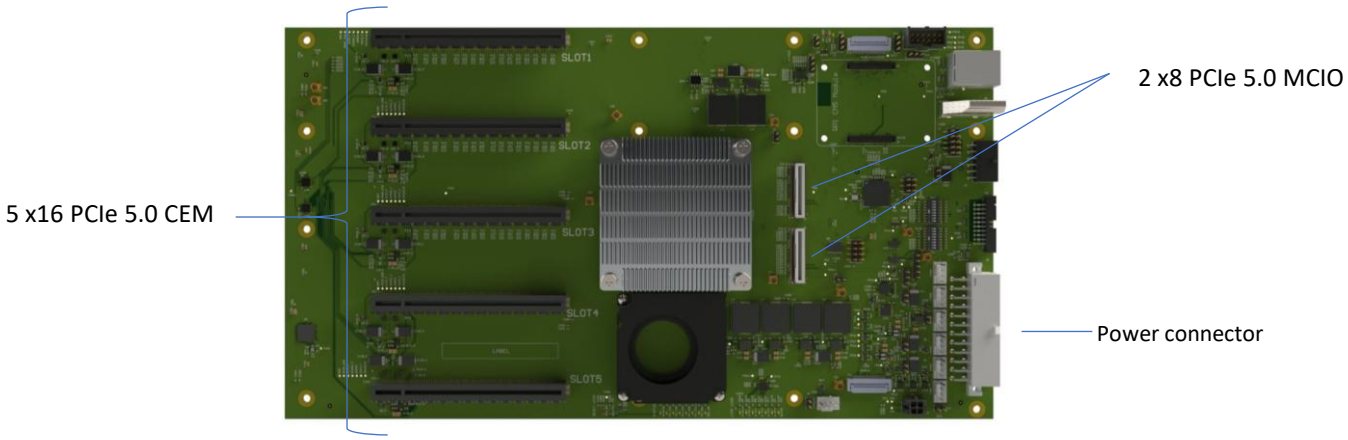
- 5x PCIe 5.0 x16 Dual Width CEM slots
- 2x PCIe 5.0 x8 MCIO
- FLASH for flexible port configurations
- Board Management Controller
- Microchip Switchtec™ PFX 100xG5
- Optional Ethernet Management

Flexible. High-Speed. Built for Demanding Workloads.

The MXB585 is a high-performance PCIe 5.0 expansion backplane designed to deliver ultimate flexibility and scalability. It features five PCIe 5.0 x16 slots that are fully configurable as either upstream or downstream, enabling a broad range of deployment options—from direct host connections to complex daisy-chained systems.

An integrated MCIO connector allows two MXB585 units to be daisy-chained, enabling seamless expansion while preserving bandwidth. The backplane's standard ATX mounting hole pattern supports straightforward mechanical integration and is optimized for side-by-side installation in a standard rackmount chassis.

Whether connected remotely via a Dolphin PCIe 5.0 adapter—such as the MXH532 or MXH572—or deployed as a standalone solution using an add-in host card or the MCIO connection to an SBC, the MXB585 adapts to your system architecture with ease.



Specifications preliminary

Mechanical Dimensions	ATX mounting hole compatible
PCIe switch	Microchip Switchtec® PFX 100xG5 Fanout PCIe® switch
slots	- 5x PCIe 5.0 x16 Dual Width CEM slots - 2x PCIe 5.0 x8 MCIO / CopprLink™ Fully configurable for upstream/downstream
Link speed	PCIe 5.0 - 256 GT/s per port
Power consumption	100W Compatible with ATX PSU
Operating Environment	Operating Temperature: 0°C - 55°C (32°F - 131°F) Relative Humidity: 5% - 95% (non- condensing)
Storage Environment	-40°C to 85°C 5 to 95% non-condensing humidity
PCI Express®	Base Specification 5.0 Card Electromechanical Specification 5.0 CopprLink 1.0
Regulatory approvals	CE Mark FCC Class A KCC RoHS compliant UL94V-0 compliant
Regulatory EMC tests (Pending)	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
Management	Optional CPU for board management and configuration/customization
SKU and ordering options	MXB585 For custom configuration contact sales@dolphinics.com or your local representative