MIC-3821

3U CompactPCI® Serial M.2 PCIe/NVMe SSD Carrier Board

Preliminary

Features

- 3U Height CompactPCI Serial interface peripheral board
- Carrier board for max quad M.2 PCIe/NVMe module
- Designed to meet EN50155 & EN50121-3-2 & EN50121-4
- PCI-SIG PCI Express M.2 Specification compliant
- PICMG CompactPCI Serial (CPCI-S.0 R2.0) compliant

Introduction

MIC-3821 is a 3U-4HP-height peripheral slot board for a CompactPCI® Serial system, equipped with quad M.2 socket modules. Each M.2 M-Key socket can accommodate an NVMe-type SSD module at max PCIe 3.0 x4 speed. One of the sockets can also support SATA III mode depending on backplane resources for added efficiency. It is suitable for 2230/2242/2260/2280 module dimensions.

The maximum PCIe data transfer rate for Gen2 (5 GT/s) or Gen3 (8 GT/s) usually depends on the CPU card and the backplane slot selected. To achieve optimum performance via all M.2 NVMe module sockets simultaneously, a PCI Express® Gen3 x8 routed from P1/P2 (CompactPCI® Serial fat pipe slot) or at least a PCI Express® Gen3 x4 from a P1-enabled backplane slot is recommended. P6 comes unassembled by default, and can be utilized for added mechanical stability. It can also provide one GbE interface activated by the CPU card by user request.

MIC-3821 provides each M.2 slot up to 3.3V/4.5A of continuous current to reserve enough for the power budget for high-performance modules. The card can be configured as individual storage or soft RAID operation in various industrial applications.

Specifications

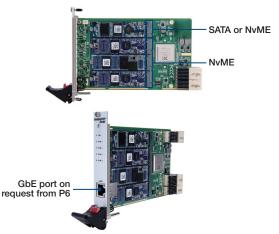| Backplane Interface	1 x PCIe x4 or x8 from P1/P2 1 x GbE from P6 on request		
PCIe switch	On-board PCI Express® Gen. 3 (8 GT/s) packet switch PI7C9X3G1632GP		
Front Panel	Default: Power LED & NvME LED 1 x RJ-45 GbE port on request		
Dimension	3U/4HP, 100 x 160 mm		
OS support	Depends on module		
Environment		Operating	Non-Operating
	Temperature	-40 ~ 70°C (-40 ~ 158°F) (depends on module spec)	-40 ~ 85°C (-40 ~ 176°F)
	Humidity	95% @ 40°C, non-condensing	95% @ 60°C, non-condensing
	Vibration	2G rms (5~500 Hz)	

Ordering Information

Part Number	Description
MIC-3821-A1S1	MIC-3812 3U CPCI-S Quad M.2 M-Key NvME Carrier

Note: Please contact local sales for GbE/USB I/O features.

Related Products

CPU board	Description
MIC-330 Series	3U CPCI-Serial 9th Gen Intel® Processor Blade
MIC-330V2 Series	3U CPCI-Serial 11th Gen Intel® Processor Blade

Chassis & Power	Description
MIC-300A Series	3U CPCI-Serial 84HP/44HP width, 3U/4U height chassis, with 8-slot backplane & mini fan
MIC-3890	3U CPCI-Serial DC-DC power module, 110 V in/ 12 V & 5 V output, 250 W
XMIC330-HAC300S	3U CPCI-Serial AC/DC power module, 12 V & 5 V output, 300 W

Product Pictures

SATA or NvME

NvME

GbE port on request from P6