

MIC-3954F

3U Compact PCI® Serial USB Multi I/O Board



Features

- 3U Height CompactPCI Serial interface peripheral board
- Up to quad port USB 3.0 Type A, dual M.2 E key sockets
- Designed to meet EN50155 & EN50121-3-2 & EN50121-4
- PICMG CompactPCI Serial (CPCI-S.0 R 2.0) compliant



Introduction

The MIC-3954F is a 3U 4HP height peripheral board adhering to the CPCI-S.0 standard. It features four USB 3.0 ports on type A connectors to the front panel and supports up to two 2230 or 2242 form factor M.2 E key sockets. These sockets come with PCIe x1 and USB 2.0 interfaces, serving various purposes such as accommodating WiFi5/6/6E modules or storage devices.

The MIC-3954F can be installed in any PCI Express® enabled peripheral slot of a CompactPCI® Serial backplane (PCIe Gen2 x 1/2/4). All on-board devices operate on PCI Express®, sharing a maximum upstream PCIe x4 Gen 2 controller bandwidth. Designed to meet EN50155, EN50121-3-2, and EN50121-4 standards, it boasts excellent mechanical, EMC, safety, and wide temperature range features. This makes it particularly well-suited for demanding and rugged applications in fields such as railway, medical, defense, and IEM.

Specifications

Backplane Interface		PCIe Gen 2 x4 from backplane P1	
Front Panel	I/O	4 x USB 3.0, 2 x SMA antenna hole	
	LED	PWR: Green (On/off) M.2 LED: Green blink (wifi module); Green on (storage module)	
On board	M.2	Up to two M.2 E key sockets on request, dual on board M.2 E Key (PCIe/USB2.0)	
Dimension	Board size	160 mm*100 mm	
	Mounting height	3U	
	Front panel width	4HP	
OS support		Windows, Linux, Vxworks, depending on extenal M.2 modules	
Environment	Temperature	Operating -40°C ~ 70°C (-40°F ~ 158°F) (dependent on M.2 module)	Non-Operating -40°C ~ 85°C (-40°F ~ 176°F)
		Humidity	95% @ 40°C, non-condensing 95% @ 60°C, non-condensing
	Vibration	Vibration:2 Grms, random (5 Hz ~ 500 Hz)	
	Shock	10 G, 11 ms, each axis three times, operation mode	

Ordering Information

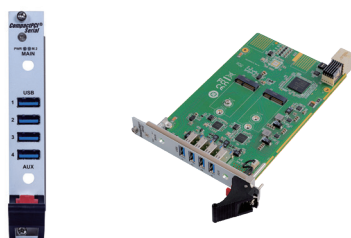
Part Number	Description
MIC-3954F-A1S1	3U CPCI-S 4 x USB typeA, 2 x M.2 E key carrier board

Note: Please contact local sales for Advantech wifi/storage module P/Ns.

Related Products

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

Product Picture



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