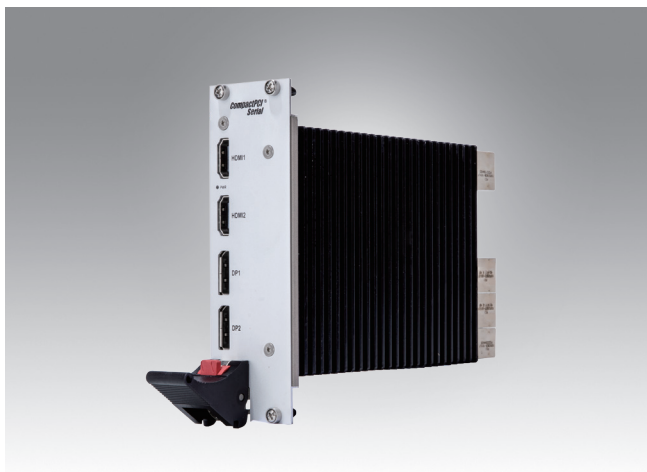# MIC-3812V2 Series 3U CompactPCI® Serial MXM Carrier Card

Features

- 3U Height CompactPCI Serial interface peripheral board
- Carrier board for an MXM 3.1 graphics module
- Two HDMI & Two DisplayPort connectors on front panel
- Support the latest NVIDIA Ada Lovelace architecture MXM GPU modules, including the SKY-MXM-2000A, SKY-MXM-3500A, and SKY-MXM-5000A
- Designed to meet EN50121-4, EN50121-3-2 and EN50155 standards
- PICMG CompactPCI Serial(CPCI-S.0 R2.0) compliant

Introduction

MIC-3812V2 is a 3U 8HP MXM carrier peripheral board, following the CPCI-S.0 standard. It can support 2 x HDMI 2.0 and 2 x DisplayPort 1.4a connectors on the front panel, with 2 x DP switchable to the backplane via P2 and P3 connectors, customizable by user request.

MIC-3812V2 is mainly used for compatibility with latest MXM GPU modules, including the SKY-MXM-2000A, SKY-MXM-3500A, and SKY-MXM-5000A built on the NVIDIA Ada Lovelace architecture; An extra power board is necessary to support TGP over 60 W for stable module operation, which is assembled on the carrier's second layer.

For best performance, MIC-3812V2 should be assembled/inserted in a CompactPCI® Serial fat pipe slot, which provides a PCI Express® x8 interface; for better thermal management, forced airflow is needed by CompactPCI® Serial chassis.

MIC-3812V2 is designed to meet EN50155, EN50121-3-2, and EN50121-4 standards, with its high capabilities on mechanical, EMC, safety and wide range of environment requirements; it is especially suited for applications in harsh environment like Railway and Medical etc.

Specifications

Interface	Carrier board for Type A, Type B or Type B+ MXM 3.1 graphics module		
Backplane Interface	2 x DP(switch to front HDMI1/DP1) to backplane via P2 and P3 connectors, customizable by user request		
Front Panel	2 x HDMI 2.0 2 x DisplayPorts 1.4a		
Dimension	3U/8HP, 100 x 160mm Weight: 660g		
OS support	Windows 10 , Linux Centos(Dependent on MXM module)		
Environment		Operating	Non-Operating
	Temperature	-40 ~ 70° C (-40°F ~ 158°F) (dependent on MXM module and heatsink solution)	-40 ~ 85° C (-40 ~ 176° F)
	Humidity	95% @ 40°C, non-condensing	95% @ 60°C, non-condensing
	Vibration	2 Grms, random (5 Hz ~ 500 Hz)	
	Shock	10 G, 11 ms, each axis three times, operation mode	

Ordering Information

Part Number	MXM module		Front Panel				Width Height
	Model	Max Power Consumption	HDMI1	HDMI2	DP1	DP2	
MIC-3812V2-2000A	SKY-MXM-2000A	60W	V	X	V	V	8HP
MIC-3812V2-3500A	SKY-MXM-3500A	115W	V	V	V	V	8HP
MIC-3812V2-5000A	SKY-MXM-5000A	115W	V	V	V	V	8HP

Note:
1. All thermal solution is validated under Advantech designed MXM modules
2. Forced air is mandatory.

Related Products

CPU board	Description
MIC-330 Series	3U CPCI-Serial Intel® 9th Gen. Processor Blade
MIC-330V2 Series	3U CPCI-Serial Intel® 11th Gen. Processor Blade
MIC-3821 Series	3U CPCI-Serial quad M.2 M-Key NvME carrier board
MIC-300A Series	3U CPCI-Serial 84HP/44HP width, 3U/4U height chassis, with 8 slots backplane & mini fan
MIC-3890DC	3U CPCI-Serial DC-DC power module, module, 110V in / 12V out, 300W
MIC-3890AC	3U CPCI-Serial AC-DC power module, 12 V & 5 V output, 300 W

Product Pictures

MIC-3812V2-2000A

MIC-3812V2-5000A & MIC-3812V2-3500A