

# MIC-3840

## 3U CompactPCI® Serial RS-232/422/485 Serial Communication Card



### Features

- 8-Port RS-232/422/485 isolated
- Speeds up to 921600bps.
- 256-byte TX and RX FIFOs
- UART 16550 compatible register set
- 2KV surge protection
- PICMG CompactPCI Serial (CPCI-S.0 R2.0) compliant

### Introduction

The MIC-3840 is a standard 3U CPCI-S.0 form factor card featuring 8 ports for serial communication. It utilizes the EXAR XR17V358 PCIe controller, which acts as a single-lane PCIe bridge connecting to 8 independently enhanced 16550 compatible UARTs. MIC-3840 supports RS-232/422/485 communication protocols at speeds of up to 921600bps, with 256-byte transmit and receive FIFO buffers. Its excellent isolation protection and EMC design make it suitable for harsh environments, rendering it an ideal solution for applications in railway rolling stock and high-performance computing.

### Specifications

Speed	up to 921600bps	
UART	256-Byte FIFO for each transmitter/receiver, 16550 compatible register set	
I/O Address	Multi-drop with auto address detection	
Data flow	Automatic RS-422/485 data flow control	
Data Bits/Stop Bits	Data Bits: 5, 6, 7, 8; stop bits: 1, 1.5, 2	
OS Support	Ubuntu 20.04, Windows® 10, Windows® 11	
Isolation Protection	Board isolation protection is AC 1.5KV, D-SUB cable protection is AC 840KV insulation protection	
Environment	Temperature	Operating (Depending on module) Non-Operating -40 ~ 70 °C (-40 ~ 185.158 °F) -40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	95% @ 40 °C, non-condensing 95% @ 60 °C, non-condensing
	Vibration (5-500 Hz)	2.0 Grms
Physical Characteristics	Dimensions	160.00 x 100.00 mm (6.30" x 3.95")
Compliance	PICMG CPCI-S.0	

### Ordering Information

Part Number	Description	On Bboard Type	Front Panel Interface
MIC-3840-A1S1	MIC-3840 3U CPCI-S 8-port DB62 RS-232/422/485 FIO	8-port	DB62(F)

Note 1: Cable is 55cm with 1 x D-Sub 62(M) to 8 x D-Sub9(M) as standard

### Front View



### Related Products

Models	Description
MIC-330	3U CPCI-S mainboard
MIC-300A	3U CPCI-S chassis
XMIC330-HAC300S	3U CPCI-S 312.5W AC-DC Power
MIC-3890	3U CPCI-S 110V input/250W DC Power