## **Connect** Tech Inc.

## **Mini PCI Express Serial**

Connect Tech's MPG00x series are rugged Mini PCIe modules that are ideal for adding extra serial port capabilities to any system with minimal increase in overall system size and power consumption. Choose from PCI Express x1 lane or a USB-2 host bus interface. Various modules are available offering switchable RS-232/422/485, optional isolation and full modem control signals. The wide operating temperature and latching connector and cabling solution allow these modules to be used in harsh environments.

Compatibility with a large variety of popular operating systems allows these boards to be easily integrated into a wide array of new and existing systems.

## **Specifications**

specifications		
Part	MPG001 - MPG002	MPG003 - MPG004
Number of Ports	2 ports	2 ports
Electrical Interface	Hardware selectable RS-232/422/485	Hardware or software selectable RS-232/422/485
Host Bus	USB	PCI Express
Connectors	Mini Tek, 2mm, 20 pins	Mini Tek, 2mm, 2 x 10 pins
Isolation	-	500V
Control Signals	RS-232: TxD, RxD, RTS, CTS, DTR, DCD, DSR, RI RS-422/485: TxD+/-, RxD+/-	RS-232: TxD, RxD, RTS, CTS, DTR, DCD, DSR, RI RS-422/485: TxD+/-, RxD+/-
Baud Rate	RS-232: 50 bps to 921.6 Kbps RS-422/485: 50 bps to 12Mbps Slow Slew Rate: 250Kbps	RS-232: 50 bps to 921.6 Kbps RS-422/485: 50 bps to 1Mbps Optional to 20Mbps Slow Slew Rate: 250Kbps
Interrupts	-	Assigned by Plug and Play resources
Memory Addresses	-	Assigned by Plug and Play resources
UART Type	USB UARTs with up to 4K byte FIFO transmit and receive FIFO buffers for each port	Dual PCle UARTs with up to 256 byte transmit and receive FIFO buffers for each port
Dimensions	50.95 mm x 30 mm Mini PCle "Full"	50.95 mm x 30 mm Mini PCIe"Full"
Environmental	Storage/Operating Temperature: -40° C to 85° C (-40° F to 185° F) Humidity: 5 to 95% non-con- densing	Storage/Operating Temperature: -40° C to 85° C (-40° F to 185° F) Humidity: 5 to 95% non-condensing
Software Compatibility	Windows 2000/CE/XP/ XP x64/XPe/Server 2003/ Server 2003 x64/Vista, QNX 6.X and Linux	Windows 2000/CE/XP/ XP x64/XPe/Server 2003/ Server 2003 x64/Vista, QNX 6.X and Linux
Power Requirements	150mA @ 3.3V Max (excluding Line loads)	175mA, 3.3V Max (Excluding Line loads)
Sofware Programmable Settings	-	Line Mode Slow Slew RS-422 Termination

Product Names & Part Numbers: Mini PCI Express Serial MPG001, MPG002, MPG003, MPG004



## **FEATURES**

✓ PCI-Express x1 Lane or USB-2 Host Bus Interface

✓ 2 ports individually isolated or non-isolated

✓ Switchable RS-232/422/485

✓ Supports full duplex (4 wire), half duplex (2 wire) with auto TxD echo cancellation modes in RS-422/485

✓ Bi-directional data speeds up to 20Mbps (optional) (RS-422/485)

> ✓ Port settings can be set up by sofware (on certain models)

✓ Slow Slew Rate capability (on certain models)

✓ Operating temperature range of -40°C to 85°C

**Connect Tech Inc.** 

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