

# MiniModule<sup>™</sup> USB2

# High-speed PC/104-Plus module lets you add up to four USB 2.0 devices



## FEATURES

- NEC µPD720101 USB 2.0 Host Controller
- Compliant with USB 2.0 Specification
- Provides USB 2.0 host root hub with up to four downstream ports
- All downstream facing ports can handle high-speed (480Mbps), full-speed (12Mbps) and low-speed (1.5Mbps) transactions
- Compliant with OHCI USB Rev1.0a
- Compliant with EHCI for USB Rev 1.0
- Supports 32-bit 33MHz PC/104-Plus host interface, compliant with PCI Rev. 2.2
- Configurable for any PC/104-Plus bus slot
- QuickStart Kit includes board, drivers, and documentation

The MiniModule<sup>™</sup> USB2 board provides a high performance PCI-based platform for incorporation of up to four USB 2.0 devices into a PC/104-Plus embedded system. Based on the December 2000 Version of the USB 2.0 standard, the MiniModule USB2 offers support for the latest USB 2.0 devices such as 802.11 WiFi interfaces or high performance video capture while maintaining backward compatibility with earlier USB 1.1 devices. USB 2.0 and USB 1.1 devices can be mixed in the system. The card provides both PC/104-Plus and PC/104 interfaces, although the PC/104 interface is utilized only to pass through bus signals and for mechanical stability. Control signals are all obtained from the PC/104-Plus (PCI) bus.

The MiniModule USB2 utilizes the NEC  $\mu$ PD720101 USB 2.0 Host Controller which is supported with drivers for a wide range of popular embedded operating systems. The card is configurable for use in any of the four PCI slots available to PC/104-Plus systems.

# **SPECIFICATIONS**

#### General

- Controller –
- NEC µPD720101 USB 2.0 Host Controller
- Card Support -
  - Complies with December 2000 USB 2.0 standard
  - Supports a mix of USB 2.0 and USB 1.1 devices
- Special Features
  - High-speed (480Mbps), full-speed (12Mbps) and low-speed (1.5Mbps) transactions
- Supports "hot" insertion/removal
- Up to four USB 2.0 devices; more devices with additional hubs
- Power connector for supplemental +5V DC input as required
- Four Slot Support Option -
- Configurable for use in any of the 4 PCI slots available to PC/104-Plus systems
- Support Software –
- Plug-and-play drivers with Windows ME / XP / 2000 / XPe

#### **Bus Interface**

• PC/104-Plus but (PCI), PC/104 bus (ISA)

#### Mechanical

- Size 90x96mm (3.6x3.8") PC/104-Plus
- Power (typical) 0.21A @ +5V
- Environmental Operating temperature: 0° to 70°C standard; –40° to +85°C extended

NOTE: Above do not include USB device power requirements

#### Warranty

• 3-year warranty

### ORDERING INFORMATION

 MODEL
 DESCRIPTION

 MM3-USB2-K-10
 QuickStart Kit (board, documentation, software)

 MM3-USB2-Q-01
 MiniModule USB2, 4 USB 2.0 Ports



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