

PCIe-USB380

8-Port USB 3.0 Host Adapter Card with 4x Independent USB 3.0 Controllers



- **x4 PCI Express® Gen2 interface to deliver 2GB/s total bandwidth**
- **8x USB 3.0 ports by 4x independent NEC/Renesas μ PD720202 Host Controllers**
- **User-configurable 900mA and 1500mA current limit**
- **Supports cable lock mechanism for reliable cable connection**
- **Supports Windows XP/7/8 and Linux**
- **Compliant with Universal Serial Bus 3.0 specification Revision 1.0**
- **Compliant with Intel® xHCI specification Revision 1.0**

Introduction

Neosys PCIe-USB380 is an 8-port USB 3.0 host adapter dedicatedly designed for industrial and vision applications. USB 3.0, or SuperSpeed USB, is an emerging bus technology to deliver ten times of data rate over USB 2.0, and is particularly useful for high-speed data storage and image devices.

Most off-the-shelf USB 3.0 cards implement multiple ports with single USB 3.0 controller, which introduce significant performance degradation for multi-port operation. To achieve maximal per-port performance, PCIe-USB380 has four independent NEC/Renesas μ PD720202 USB 3.0 Host Controllers and x4 PCI Express® Gen2 interface to fulfill up to 5 Gbps bandwidth for each port when four ports run simultaneously. In addition to bandwidth advantage, PCIe-USB380 features on-board regulated DC power circuit with a unique design of user-configurable 900mA/1500mA current limit to supply stable 5 VDC power to external USB devices. We also design PCIe-USB380 with a cable lock mechanism so users can firmly attach a USB cable to its panel or on-board connectors.

Combining high bandwidth, industrial-grade power design and reliable cable connection, PCIe-USB380 brings great convenience to interface USB 3.0 devices for versatile operating systems, such as Windows XP, 7, 8 and Linux.

Applications

- Machine vision & AOI
- Production test for USB3 devices
- Medical imaging
- External storage expansion

Specifications

Bus Interface	4-lanes, Gen2 PCI Express interface Compliant with PCI Express Base Specification Revision 2.0
USB Ports	8x USB 3.0 ports, compatible with USB 2.0/1.1/1.0
USB Controller	4x NEC/Renesas μ PD720202 Host Controllers Compliant with Universal Serial Bus 3.0 specification Revision 1.0 Compliant with Intel® xHCI specification Revision 1.0
USB Connectors	4x on-panel USB 3.0 Type-A connectors with M2 screw threads 4x on-board USB 3.0 Type-A connectors with fix points for cable tie
USB Per-Port Current Limit	User-configurable 900mA/1500mA per-port current limit
Power Requirement	Maximal 2A@3.3V from PCI Express bus Maximal 5.5A@12V from directly PCI Express bus for USB devices
Operating Temperature	0 ~ 60°C with ambient air flow
Dimension	167.7 mm (W) x 111.2 mm (H)

Order Information

- **PCIe-USB380**
8-Port USB 3.0 host adapter with 4x independent USB 3.0 controllers
- **USB3-Cable-3M**
USB3 Type-A to Micro-B cable with latched connectors, 3-meter length