PCIe-USB380/340

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

Features

- x4 PCI Express® Gen2 interface to deliver 2GB/s total bandwidth
- 8-port/4-port by 4x NEC/Renesas µPD720202 Host Controllers
- On-board 5VDC regulated power supply, no external power needed
- User-configurable 900mA and 1500mA current limit
- Software-programmable per-port power on/off control
- Supports cable-lock mechanism for reliable cable connection
- Supports Windows XP/7/8 and Linux
- Compliant with
  - Universal Serial Bus 3.0 specification Rev. 1.0
  - Intel® xHCI specification Rev. 1.0

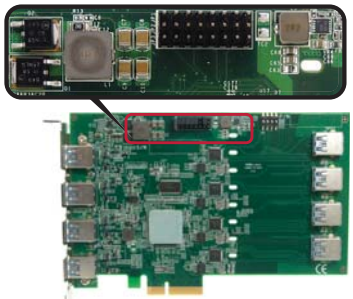
Introduction

Neousys PCIe-USB380/340 is an 8-port/4-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 imaging devices.

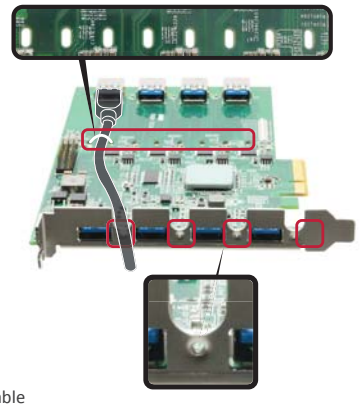
Most off-the-shelf USB 3.0 cards implement multiple ports with single USB 3.0 controller, which introduce significant performance degradation for multi-port operation. To achieve maximal per-port performance, PCIe-USB380 has four independent NEC/Renesas µPD720202 USB 3.0 Host Controllers and x4 PCI Express® Gen2 interface to fulfill up to 5 Gbps bandwidth for each port when four ports run simultaneously. In addition to bandwidth advantage, PCIe-USB380/340 features on-board regulated 5VDC power supply with a unique design of user-configurable 900mA/1500mA current limit to supply stable 5VDC power to external USB devices. It also supports software-programmable per-port power on/off control for fault recovery operations.

Combining high bandwidth, industrial-grade power design and reliable cable connection, PCIe-USB380/340 brings great convenience to interface USB 3.0 devices for versatile operating systems, such as Windows XP, 7, 8 and Linux.

On-board 5VDC regulated power supply and
User-configurable 900mA and 1500mA current limit



Cable-lock mechanism for panel and
on-board USB3 connectors



Auxiliary function API for software-programmable
per-port power on/off control

PCIe-USB Series Specifications

Model	PCIe-USB380	PCIe-USB340
USB Ports	8x USB 3.0 ports, Compatible with USB 2.0/1.1/1.0	4x USB 3.0 ports, Compatible with USB 2.0/1.1/1.0
USB Connectors	4x panel-accessible 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	4x panel-accessible USB 3.0 Type-A connectors with M2 screw threads
Bus Interface	4-lanes, Gen2 PCI Express interface, compliant with PCI Express Base Specification Revision 2.0	
USB Controller	4x NEC/Renesas µPD720202 Host Controllers Compliant with Universal Serial Bus 3.0 specification Revision 1.0 Compliant with Intel® xHCI specification Revision 1.0	
USB Per-Port Current Limit	User-configurable 900mA/1500mA per-port current limit	
Power Requirement	Maximal 2.0A@3.3V from PCI Express bus Maximal 5.5A@12V from PCI Express bus for devices	Maximal 2.0A@3.3V from PCI Express bus Maximal 2.8A@12V from PCI Express bus for devices
Operating Temperature	0°C ~ 60°C with ambient air flow	
Dimension	167.7 m (W) x 111.2 mm (H)	

Application

1. Machine vision & AOI
2. Production test for USB3 devices
3. Medical Imaging
4. 3D image scanning

Order Information

PCIe-USB380
8-Port USB 3.0 host adapter with 4x independent USB 3.0 controllers

PCIe-USB340
4-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