AX92321

4-port/8-port USB 3.0 PCI Express Card with 4 Independent Host Controllers

8 x USB 3.0

4 x USB 3.0

▲ Side view
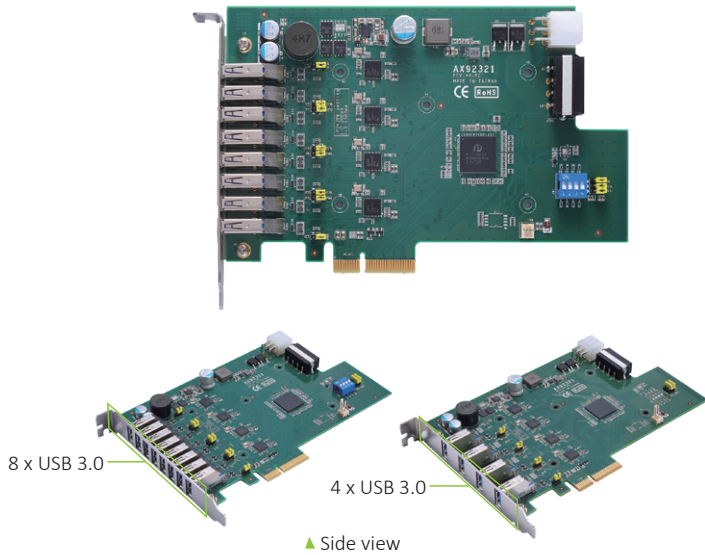
Features

- 4 or 8 USB 3.0 ports
- 4 independent USB 3.0 host controllers
- 900 mA/1500 mA max. per port configurable via jumper settings
- Compliant with USB 3.0 Rev.1.0 and Intel® xHCI Rev.1.0
- PCI Express x4 interface
- Operating temperature from 0°C to 70°C
- Supports Windows® 7/10 and Ubuntu 20.04 LTS
- Supports power on/off for each port via software settings

Introduction

The AX92321 has 4-port and 8-port versions for users to choose from for various applications. The 4-port AX92321 has four independent Renesas µPD720202 USB 3.0 host controllers to offer up to 5 Gbps bandwidth per port-even when four ports are used simultaneously. The AX92321 can be configured to support maximum of 900mA or 1500mA current output to supply stable power for various external USB devices. The AX92321 also supports power on/off control for each port via software settings. This USB 3.0 PCI Express card is able to operate under a wide operating temperature range of 0°C to 70°C, allowing it to be used in harsh environments for vision and factory automation applications.

Specifications

USB

Channels	4 x USB 3.0 type A connector (AX92321-4U) 8 x USB 3.0 type A connector (AX92321-8U)
Controller	4 x Renesas µPD720202 host controllers Compliant with USB 3.0 specification and Intel® xHCI specification, revision 1.0
Max. Current	900/1500 mA maximum per port configurable via jumper settings
Data Transfer Rate	Super speed (5.0 Gbps)/high speed (480.0 Mbps)/full speed (12.0 Mbps)/low speed (1.5 Mbps)

General

Bus Type	PCI Express x4 Gen2
Power Requirements	Power from PCIe slot (total power max. 20W USB power output) 2.1A@ +12V 0.8A @ +3.3V Power from ATX power connector 5A @ +12V or 2.5A @ +24V 0.8A @ +3.3V (from PCIe slot) Power from 4P Molex power connector 5A @ +12V 0.8A @ +3.3V (from PCIe slot)
Dimensions	168 mm (6.6") x 107 mm (4.2")
Power Connector	4-pin Molex connector 6-pin ATX power connector
Operating Temperature	0°C to +70°C (+32°F to +158°F)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Operating Humidity	10- 95% RH, non-condensing
Certifications	CE compliance
OS	Windows® 7/10 (32/64-bit) Ubuntu 20.04 LTS
Software	Each port's power on/off is controlled by software

Ordering Information

AX92321-4U (P/N: E392321103)	4-port USB 3.0 PCIe x4 card
AX92321-8U (P/N: E392321102)	8-port USB 3.0 PCIe x4 card
For IPC962/964 Riser Card Power Connector (P/N: 59492320700E)	Power cable 4P3.0/6P4.2, L=100 mm