# PCIS-8580-4S/PCIS-8580-13S

# 4-Slot/13-Slot PCI-to-PCI Extension System

#### **Features**

- Compliant with PCI local bus specification Rev 2.2
- Compliant with PCI bridge architecture specification Rev 1.2
- PCIS-8580-4S extends four PCI slots in a shoebox size wall-mount chassis with built-in 200 W power supply
- PCIS-8580-13S extends 13 full-size PCI slots in a 19" rack-mount chassis with built-in 400 W power supply
- Full 32-bit/33 MHz PCI bandwidth extension (132 MB/s)
- Extension distance of up to 10 meters (extension cables at 2 M, 5 M, and 10 M)
- Complete hardware and software transparency
- 24-pin DVI-D connector for robust connectivity





PCIS-8580-4S

PCIS-8580-13S

#### Introduction

The ADLINK PCIS-8580 is a PCI-to-PCI extension systems to extend the PCI buses of host computers. With its state-of-the-art StarFabric high-speed serial link technology, you can extend your PCI bus of a host computer to an external chassis, which accommodates four (PCIS-8580-4S) or 13 (PCIS-8580-13S) additional PCI slots. This advanced technology provides full 32-bit/33 MHz PCI bandwidth (132 MB/s) and a maximum of 10 M distance between host computer and extension chassis. The ADLINK PCI-to-PCI extension system utilizes the concept of "serialized bridge" to provide complete hardware and software transparency to your host system. Any hardware installed in the extension chassis works as if it is directly installed inside the host system without the need for additional drivers or software.

The ADLINK PCIS-8580 PCI-to-PCI extension system is composed of three major components: a PCI extension card (LPCI-8575), an extension chassis (RK-8005/RK-8014), and a cable (ACL-PCIEXT-2). The PCI extension card is the core of this system. It acts as a PCI bridge with the capability to serialize PCI signals and maintain a 5 Gbps serial link between the host system and extension chassis. The extension chassis, which is a 4-slot wall-mount chassis (RK-8005) or a 13-slot rack-mount chassis (RK-8014), is the platform to accommodate PCI slots. It contains a backplane, a power supply, and a pre-installed PCI extension card. The cable, which consists of DVI-D connector and shielding twisted pairs, provides robust connectivity and maintains proper signal quality between the host computer and the extension chassis.

# **Specifications**



#### LPCI-8575 PCI-PCI Extension Card

- UPCI local bus specification Rev 2.2 compliant
- PCI bridge architecture specification Rev 1.2 compliant
- Supports both 5 V and 3.3 V PCI buses
- Data throughput: full 32-bit/33 MHz PCI bandwidth (132 MB/s)
- I/O connector: DVI-D 24-pin connector
- Maximal extended distance: 10 M
- Power requirements

+5 V	+3.3 V
190 mA	250 mA





# RK-8005 Extended Chassis

■ Dimensions:

122 mm (W) x 195 mm (H) x 259 mm (D)

- Weight: 3.2 kg
- Backplane: 5x 32-bit/33 MHz PCI slots
- 1 slot for extension card
- 4 slots available for PCI cards
- Power supply
- Input voltage: 85 Vac to 265 Vac
- · Output: 200 W
- Cooling: One 80 mm ball bearing fan

# RK-8014 Extension chassis

■ Dimension:

483.5 mm (W) x 177 mm (H) x 448.5 mm (D)

- Weight: 12 kg
- Backplane: 14x 32-bit/33 MHz PCI slots
- slot for extension card
- 13 slots available for PCI cards
- Power supply
- Input voltage: 85 Vac to 265 Vac, auto-switching
- Output: 400 W
- Cooling: Two 120 mm ball bearing fans



#### ACL-PCIEXT-2/-5/-10

- Length
- ACL-PCIEXT-2: 2 M
- ACL-PCIEXT-5: 5 M • ACL-PCIEXT-10: 10 M
- Construction: 8 pairs of shielding twisted copper wires
- Connector: DVI-D 24-pin

#### General

- Operating temperature: 0°C to 50°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 10 to 90%, non-condensing

#### **Applications**

- Industrial automation/control
- Electronics manufacturing test
- Military/aerospace
- Video capture
- Remote test and measurement

# **Ordering Information**

# ■ PCIS-8580-4S

4-slot PCI-to-PCI extension system, including the LPCI-8575 extension card, RK-8005 4-slot extension chassis, and an ACL-PCIEXT-2 cable

# PCIS-8580-13S

13-slot PCI-to-PCI extension system, including the LPCI-8575 extension card, RK-8005 4-slot extension chassis, and an ACL-PCIEXT-2 cable

# ■ ACL-PCIEXT-2

Optional 2 M extension cable

#### ■ ACL-PCIEXT-5

Optional 5 M extension cable

#### ■ ACL-PCIEXT-10

Optional 10 M extension cable