

PCI-8570/PXI-8570

PCI Control of PXI/CompactPCI



Introduction

The ADLINK PCI/PXI-8570 expansion kit is a PCI-to-PXI or PXI-to-PXI expansion module that functions as a transparent PCI-to-PXI bridge register set. Implementing master and slave extension modules, users can have direct control of PXI/CompactPCI chassis from any other PC or another PXI/CompactPCI system. All devices on the system are deemed to be local devices on the same PCI bus.

The PCI interface supports 64-bit or 32-bit PCI buses operating at 66 MHz or 33 MHz. By adopting shielded twisted copper cables, PCI-8570/PXI-8570 can expand the transmission distance to 10 meters. One master expansion card (either PCI-8570 or PXI-8570) can expand up to 2 slave expansion modules (PXI-8570) at the same time. A bundled link can support the full bandwidth of a 64-bit/66 MHz PCI bus. All interrupts asserted by add-in cards in the expansion system are passed through the expansion set to the host system.

With ADLINK PCI/PXI-8570, users can combine PCI, CompactPCI, and PXI devices in the same system, increase the available number of PXI/CompactPCI slots for high-density I/O application and separate a control system from a harsh environment with an expansion chassis.

Features

- Direct PC control of PXI/CompactPCI systems
- Multi-chassis configurations for PXI/CompactPCI
- Up to 2 PCI segments extended from single PCI/PXI-8570
- Up to 64-bit, 66 MHz PCI bus expansion
- StarFabric link performance
- 528 MB/s peak (64-bit, 66 MHz PCI)
- 132 MB/s peak (32-bit, 33 MHz PCI)
- expansion distance of up to 10 meters (extension cables at 2 M, 5 M, and 10 M)
- Completely hardware and software transparent
- Independence of operating systems
- Seamless PCI interrupt extension
- Compliant with
 - PCI local Bus Specifications Rev. 2.2
 - PCI-to-PCI Bridge Architecture Specifications Rev. 1.1
 - PXI Specifications Rev. 2.2

General Specifications

- Operating temperature: 0°C to +50°C (32°F to 122°F)
- Storage temperature: -20°C to +80°C (-4°F to 176°F)
- Relative humidity: 10% to 90%, non-condensing

Certification

- EMC/EMI: CE, FCC Class A

Ordering Information

- **PCI-PXI Expansion Kit**
Includes One PCI-8570, One PXI-8570, and One ACL-PXIES-2 Cable
- **PXI-PXI Expansion Kit**
Includes Two PXI-8570 and One ACL-PXIES-2 Cable
- **PCI-8570**
PCI-to-PXI Expansion Interface Card for Host PC
- **PXI-8570**
PCI-to-PXI/PXI-to-PXI Expansion Interface Module for PXI Chassis
- **ACL-PXIES-2**
Copper Cable Kit, 2 M
- **ACL-PXIES-5**
Copper Cable Kit, 5 M
- **ACL-PXIES-10**
Copper Cable Kit, 10 M



PCI-8570



PXI-8570



ACL-PXIES-2/-5/-10

Specifications

■ PCI-8570

- PCI™ local bus specifications Rev. 2.2 compliant
- Maximum data throughput
 - 132 MB/s (32-bit, 33 MHz PCI)
 - 528 MB/s (64-bit, 66 MHz PCI)
- I/O Connector: RJ-45 connector x 4
- Extended distance of up to 10 meters
- Dimensions (not including connectors): 160 mm (H) x 100 mm (W) (6.24" x 3.9")
- Power requirement:

Device	+5 V	+3.3 V
PCI-8570	190 mA	250 mA

■ PXI-8570

- PXI™ Specifications Rev. 2.2 compliant
- PCI-to-PCI Bridge Architecture Specifications Rev. 1.1 compliant
- PCI™ Local Bus Specifications Rev. 2.2 compliant
- Supports both 32-bit/66 MHz and 64-bit/66 MHz PCI™ interface
- I/O Connector: RJ-45 connector x 4
- Internal arbiter supports up to 7 external masters
- Up to seven PCI clock/bus requests
- Extended distance of up to 10 meters
- Dimensions: 3U PXI form factor 175 mm (W) x 107 mm (H) (6.82" x 4.17")
- Power requirement

Device	+3.3 V
PXI-8570	540 mA

■ ACL-PXIES-2/-5/-10

- Length: 2 M, 5 M, 10 M