PCI-8570/PXI-8570

PCI-to-PXI/PXI-to-PXI Extension Kit

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 extension
- StarFabric link performance
  - 528 MB/s peak (64-bit, 66 MHz PCI)
  - 132 MB/s peak (32-bit, 33 MHz PCI)
- Extension 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

Introduction

ADLINK PCI/PXI-8570 Extension Kit is a PCI-to-PXI or PXI-to-PXI extension module that functions as a transparent PCI-to-PCI bridge register set. Implementing master and slave extension modules, users can have direct control on 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 33MHz. By adopting shielded twisted copper cables, PCI-8570/PXI-8570 can extend the transmission distance in no less than 10 meters. One master extension card (either PCI-8570 or PXI-8570) can expand up to 2 slave extension modules (PXI-8570) at the same time. A bundled link can support the full bandwidth of 64-bit/66 MHz PCI bus. All interrupts asserted by add-in cards in the extension system are passed through the extension 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 extension chassis.

Specifications

PCI-8570

- Compliant with PCI™ local bus specifications Rev. 2.2
- 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)
- Power requirement:

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

PXI-8570

- Compliant with PXI™ Specifications Rev. 2.2
- Compliant with PCI-to-PCI Bridge Architecture Specifications Rev. 1.1
- Compliant with PCI™ Local Bus Specifications Rev. 2.2
- Supports both 32-bit/66 MHz and 64-bit/66 MHz PCI™ interface
- I/O Connector: RJ-45 connector x 4
- Extended distance of up to 10 meters
- Dimensions: 3U PXI form factor 175 mm (W) x 107 mm (H)
- Power requirement:

Device	+3.3 V
PXI-8570	540 mA

ACL-PXIES-2/-5/-10

- Length
  - ACL-PXIES-2: 2 M
  - ACL-PXIES-5: 5 M
  - ACL-PXIES-10: 10 M
- Construction: Shielded copper cable

General Specifications

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

Certification

- EMC/EMI: CE, FCC Class A

Applications

- Industrial automation/control
- Electronics manufacturing test
- Military/aerospace
- Video capture
- Remote test and measurement
- Test system for rugged environments
- High-density I/O system

Ordering Information

- **PCI-PXI Extension Kit**
  Including one PCI-8570, one PXI-8570 and one ACL-PXIES-2 cable
- **PXI-PXI Extension Kit**
  Including two PXI-8570 and one ACL-PXIES-2 cable
- **PCI-8570**
  PCI-to-PXI Extension Interface Card for host PC
- **PXI-8570**
  PCI-to-PXI/PXI-to-PXI Extension 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