

# PCI-8570/PXI-8570

PCI Control of PXI/CompactPCI

#### 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 5 meters
- 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

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-PCI 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 5 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.



### Ordering Information

- 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-5 Copper Cable Kit, 5 M

## Specifications

| Model Name              |        | PCI-8570  | PXI-8570  |
|-------------------------|--------|---|---|
| Compliance              |        | PCI™ local bus specifications Rev. 2.2 compliant                    | PXI™ Specifications Rev. 2.2 compliant                              |
|                         |        |   | PCI-to-PCI Bridge Architecture Specifications Rev. 1.1<br>compliant |
|                         |        |   | PCI™ Local Bus Specifications Rev. 2.2 compliant                    |
| Operating Temp.         |        | 0°C to +50°C (32°F to 122°F)  |   |
| Storage Temp.           |        | -20°C to +80°C (-4°F to 176°F)                                      |   |
| Relative Humidity       |        | 10% to 90%, non-condensing  |   |
| Maximum data throughput |        | 132 MB/s (32-bit, 33 MHz PCI)<br>528 MB/s (64-bit, 66 MHz PCI)      |   |
| PCI™ interface          |        | 32-bit/66 MHz and 64-bit/66 MHz                                     |   |
| I/O Connector           |        | RJ-45 connector x 4   |   |
| Extended distance       |        | up to 10 meters   |   |
| Internal arbiter        |        |   | supports up to 7 external masters                                   |
| Dimensions              |        | 160 mm (H) x 100 mm (W)(6.24" x 3.9")<br>(not including connectors) | 3U PXI form factor 175 mm (W) x 107 mm (H)<br>(6.82″ x 4.17″)       |
| Power<br>requirement    | +5 V   | 190 mA  |   |
|                         | +3.3 V | 250 mA  | 540 mA  |
| ACL-PXIES-5             |        | Length: 5 M   |   |
| Emissions Compliance    |        | FCC Class A ,CE Compliance  |   |

