PCIe-8560/PXI-8565

PCI Express Control of PXI/CompactPCI

Introduction

The PCI Express-to-PXI/CompactPCI expansion kit provides control of PXI/CompactPCI modules installed in a PXI/CompactPCI expansion system using high-bandwidth PCI Express technology. With comprehensive hardware and software transparency, the expansion kit enables fast and convenient detection of any installed PXI/CompactPCI cards in the expansion system, without requiring additional drivers or software installation.

Controlling PXI™/CompactPCI® with PCI Express®

The PCIe-8560 and PXI-8565 PCI Express-to-PXI/CompactPCI expansion kit provides additional PXI slots to the host computer by implementing a PCI Express-based control of PXI/CompactPCI modules. The technology consists of a PCIe-8560 card installed in the host computer, a shielded cable, and the expansion system with the 3U (Eurocard) PXI-8565 expansion module. The PCIe-8560 comes in a PCI Express x1 footprint and converts PCI Express signals to a PCI bridge that supports seven 32-bit/66 MHz PXI/CompactPCI modules.

Controlling 6U CompactPCI®/PXI™ Modules

For applications requiring control of 6U PXI or CompactPCI modules through PCI Express, ADLINK provides the PXI-8565/6U, the 6U version of PXI-8565. The PXI-8565/6U provides the exact same features as PXI-8565 but in a 6U CompactPCI/PXI form factor. The product package includes one PCIe-8560 to plug into a host PC, one PXI-8565/6U for the remote 6U CompactPCI/PXI chassis, and one ACL-EXPRESS-1/3/7 expansion cable.

Features

- **PCI Express-based control of PXI/CompactPCI**
- **High-speed PCI Express x1 interface**
- **Direct control of PXI/CompactPCI systems**
- **Supports 32-bit/66 MHz PCI™ interface**
- **Expansion distance of up to 7 meters (expansion cables at 1 M, 3 M, and 7 M)**
- **Comprehensive hardware and software transparency**
- **Compliant with**
  - **PCI Express® Base Specifications Rev. 1.0a**
  - **PXI™ Specifications Rev. 2.2**
  - **PCI-to-PCI Bridge Architecture Specifications Rev. 1.2**
  - **PCI™ Local Bus Specifications Rev. 3.0**

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 Express-to-PXI Expansion Kit**
  Includes One PCIe-8560, One PXI-8565, and One ACL-EXPRESS-3 Cable
- **PCIe-8560**
  PCI Express-to-PXI Expansion Interface Card for host PC
- **PXI-8565**
  PCI Express-to-PXI Expansion Interface Card for 3U CompactPCI/PXI Chassis
- **PXI-8565/6U**
  PCI Express-to-PXI Expansion Interfce Card for 6U CompactPCI/PXI Chassis
- **ACL-EXPRESS-1**
  High-speed Expansion Cable, 1 M
- **ACL-EXPRESS-3**
  High-speed Expansion Cable, 3 M
- **ACL-EXPRESS-7**
  High-speed Expansion Cable, 7 M

Specifications

- PCIe-8560
  - PCI Express Base Specifications Rev. 1.0a compliant
  - PCI Express x1 link with 250 MB/s data throughput
  - Extended distance of up to 7 meters
  - Dimension: Low-profile PCI Express card 69 mm (H) x 87 mm (W) (2.69" x 3.39")
  - Power requirement:

Device	+3.3 V
PCIe-8560	210 mA (max)

- PXI-8565, PXI-8565/6U
  - PXI™ Specifications Rev. 2.2 compliant
  - PCI-to-PCI Bridge Architecture Specifications Rev. 1.2 compliant
  - PCI™ Local Bus Specifications Rev. 3.0 compliant
  - Supports 32-bit/66 MHz PCI™ interface
  - Internal arbiter supports up to 7 external masters
  - Up to seven PCI clock/bus requests
  - Extended distance of up to 7 meters
  - Dimensions: PXI-8565: 175 mm (W) x 107 mm (H) (6.82" x 4.17")
    PXI-8565/6U: 175 mm (W) x 233.35 mm (H) (6.82" x 9.1")
  - Power requirement:

Device	+3.3 V
PXI-8565, PXI-8565/6U	720 mA

- ACL-EXPRESS-1/-3/-7
  - Length: 1 M, 3 M, 7 M