

# PCIe-PXIe-8638

PCI Express Control of PXI Express

#### Features

- PXI-5 PXI Express hardware specification rev.2.0 compliant
- PCI Express<sup>®</sup> Base specifications rev.2.0 compliant
- PCle Gen 2 x8 ports each support up to 4GB/s
- PXI Express link capability:
  - Four link configuration: x4 x4 x4 x4
  - Two link configuration: x16 x8
- Expansion distance up to 5m with 2m or 5m expansion cables
- Comprehensive hardware and software transparency
- Flexible option for multi-chassis expansion as a daisy-chain or star-chain configured



#### Introduction

The PCIe-PXIe-8638 PCI Express-to-PXI Express expansion kit provides control of PXI Express modules installed in a PXI Express chassis using high bandwidth PCI Express technology. The extension kit can provide up to 4GB/s using PCIe Gen 2 x8 signaling.

The PCIe-PXIe-8638 PCI Express-to-PXI Express expansion kit provides additional PXI instruments slots to the host computer by implementing a PCI Express-based control of PXI modules. The technology consists of a PCIe-8638 host adapter installed in the host computer, a PCIe x8 cable, and a PXIe-8638, a remote controller with the 3U (Eurocard) expansion module. The PCIe-8638 comes in a PCI Express x8 footprint and equips with PCIe x8 cable connector.

PXIe-8638D with dual ports provides capability of multi-chassis control as a daisy-chain configured. The upper port would be connected to a PCIe-8638 which be installed in a host PC. And the lower port would be connected to another PXIe-8638 or PXIe-8638D in subsequent chassis.

PXIe-8638P also is another option on multi-chassis expansion as a daisy-chain or star-chain configured for user only having PXIe-8638 at first place. with PXIe-8638P in a perapheral slot, it can connect to another chassis with PXIe-8638 or PXIe-8638D to establish multi-chassis control.

With comprehensive hardware and software transparency, the expansion kit enables fast and convenient detection of any PXI cards installed in the system, requiring no additional drivers or software.

#### **Ordering Information**

PCIe-PXIe-8638 PCI Express-to-PXI Express Expansion
 2 meter Kit

Includes one PCIe-8638, one PXIe-8638, and one ACL-PCIEX8-2 2 meter cable

- PCIe-PXIe-8638 PCI Express-to-PXI Express Expansion 5 meter Kit Includes one PCIe-8638, one PXIe-8638,
  - and one ACLPCIEX8-5 5 meter cable
- PCIe-8638 PXIe remote controller for PCIe-to-PXIe cable extension
- PXIe-8638P

PXIe-to-PXIe extension for multi-chassis expansion as a daisy-chain or star-chain configured

## **Cable Accessories**

- PCIe-PXIe-8638/2M PCIe X8 cable, 2M
- PCIe-PXIe-8638/5M
  PCIe X8 cable, 5M

## **Specifications**

| Model Name              | PXle-8638                                                  | PXIe-8638D                                                  | PXIe-8638P      |  |  |
|-------------------------|------------------------------------------------------------|-------------------------------------------------------------|-----------------|--|--|
| Compliance              | PXI-5 PXI Express hardware specification Rev.2.0 compliant | PXI-5 PXI Express hardware specification Rev.2.0 compliant  |                 |  |  |
| Maximum data throughput | PCI Express gen 2 x8 link with 4GB/s<br>data throughput    | Two PCle gen 2 x8 ports each up to 4GB/s data throughput    |                 |  |  |
| Extended distance       | Up to 5m                                                   | Two PCle gen 2 x8 ports each up to<br>4GB/s data throughput |                 |  |  |
| Installation            | Controller slot 1                                          | Controller slot 1                                           | Peripheral slot |  |  |
| Dimensions              | Low-profile PCI Express card<br>142 mm (W) x 69 mm (H)     | PXI Express system module:<br>175 mm (W) x 107 mm (H)       |                 |  |  |
| Operating temperature   | 0°C to 55°C                                                |                                                             |                 |  |  |
| Storage temperature     | -40~71°C (-40~158°F)                                       |                                                             |                 |  |  |
| Relative humidity       | 10% to 90%, non-condensing                                 |                                                             |                 |  |  |

## **Product Illustration**



### **Bus Extension Card Selection Guide**

| ADLINK Bus extension card | Connector form factor |                                |                      |                  |  |
|---------------------------|-----------------------|--------------------------------|----------------------|------------------|--|
|                           | PCle X8               | PXIe system controller<br>slot | PXIe peripheral slot | PXIe Hybrid slot |  |
| PCle-8638                 | $\checkmark$          |                                |                      |                  |  |
| PXIe-8638                 |                       | $\checkmark$                   |                      |                  |  |
| PXIe-8638D                |                       | $\checkmark$                   |                      |                  |  |
| PXIe-8638P                |                       |                                | $\checkmark$         | $\checkmark$     |  |



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