# PXIe-3975

## 3U Intel® Core™ i5-520E 2.4 GHz Dual-Core Processor-based PXI Express Controller



## Introduction

The ADLINK PXIe-3975 PXI Express embedded controller is based on the Intel® Core™ i5 processor specifically designed for hybrid PXI Express based testing systems. A rugged and stable operating environment is provided for a variety testing and measurement applications.

Combining state-of-the-art Intel® Core™ i5-520E 2.4 GHz processors, and up to 8 GB of 1066 MHz DDR3 memory, the PXIe-3975 utilizes two separate computing engines on a single processor, enabling execution of two independent tasks simultaneously in a multi-tasking environment. With a configurable PCIe switch, the PXIe-3975 can support four links x4 or two links x8 PXI Express link capability, with maximum system throughput of up to 2 GB/s.

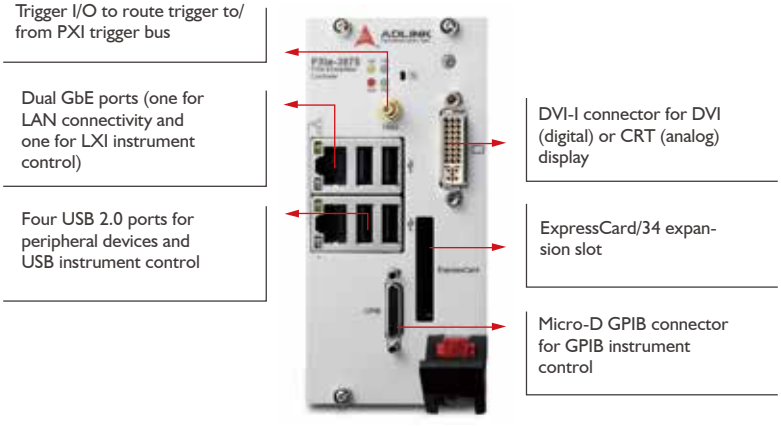
The ADLINK PXIe-3975 provides flexible scalability with a front panel-mounted ExpressCard/34 expansion slot. Users can extend system function with easily installed ExpressCard modules, such as ExpressCard to USB 3.0, or a bus expansion kit from ExpressCard to PXI/PCI. In addition, the ADLINK PXIe-3975 also provides ample interface flexibility, including dual Gigabit Ethernet ports, one for LAN connection and the other for controlling LXI instruments, four USB 2.0 ports for peripheral devices and USB instrument control, and a Micro-D GPIB connector for GPIB instrument connection, for hybrid PXIe-based testing systems control.

## Features

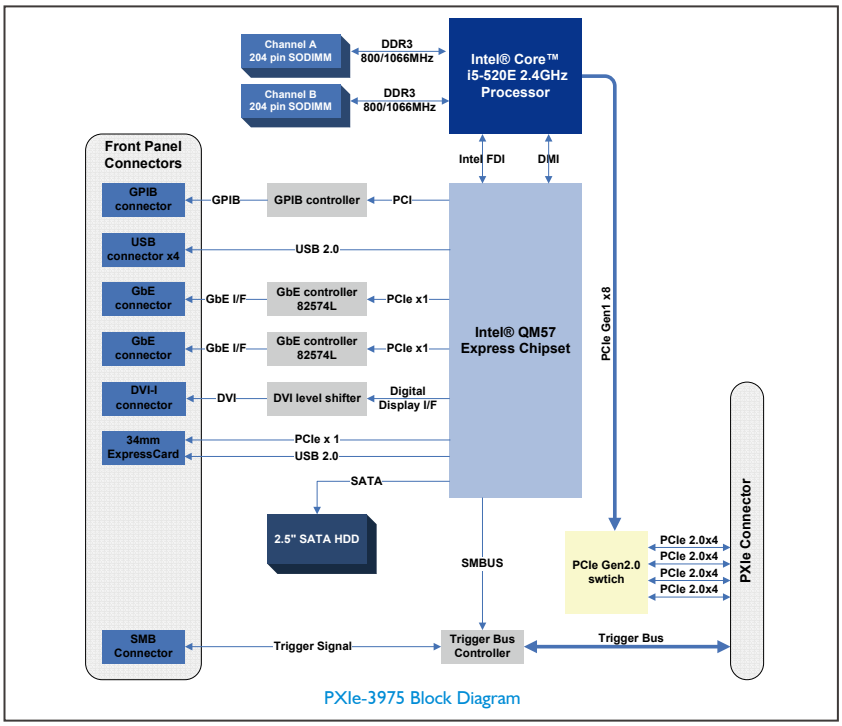
- **PXI™-5 PXI Express hardware specifications Rev.1.0 compliant**
- **Powerful computing power**
  - **Intel® Core™ i5-520E 2.4 GHz processor**
- **Dual Channel DDR3 SODIMM**
  - **Up to 8 GB 1066 MHz**
- **Maximum System Throughput 2 GB/s**
- **PXI Express Link Capability**
  - **Four Links Configuration: x4 x4 x4 x4**
  - **Two Links Configuration: x8 x8**
- **Integrated SATA storage**
  - **320 GB (or greater) HDD or 160 GB (or greater) SSD**
- **Integrated I/O**
  - **Dual Gigabit Ethernet ports**
  - **Four USB 2.0 ports**
  - **Built-in GPIB (IEEE488) controller**
  - **DVI-I video connector**
  - **ExpressCard/34 expansion slot**
  - **Trigger I/O for advanced PXI™ trigger functions**
- **Programmable watchdog timer**

### Supported Operating System

- Windows XP x32, Windows 7 x32/x64




PXIe-3975 Front Panel




PXIe-3975 Block Diagram

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## Specifications

| Model Name | PXIe-3975 |
|---|---|
| **Core Features** | |
| CPU | Intel® Core™ i5-520E 2.4 GHz |
| DMI | 2.5 GT/s |
| Chipset | Intel® QM57 Express Chipset |
| Memory | Up to 8 GB SO-DIMM memory<br>Supports dual-channel DDR3 SDRAM, 800/1066 MHz |
| **Display** | |
| DVI | DVI output provides up to 1920 x 1200 at 60Hz resolution or up to 2048 x 1536 bpp at 75Hz |
| VGA | Analog VGA output provides up to 1920 x 1200 at 60Hz resolution or up to 2048 x 1536 bpp at 75Hz |
| **I/O Connectivity** | |
| Ethernet | Intel® 82574L Gigabit Ethernet controller<br>Two RJ-45 connectors with speed/link/active LED on the faceplate |
| USB | 4 x USB 2.0 on the faceplate |
| GPIB | Onboard IEEE488 GPIB controller<br>Micro-D 25-pin connector on the faceplate (ACL-IEEE488-MD1-A cable required) |
| Trigger I/O | SMB connector on the faceplate to route an external trigger signal to/from PXI trigger bus |
| ExpressCard/34 | ExpressCard 34mm expansion slot |
| **Storage** | |
| HDD | 320 GB (or greater) SATA hard drive |
| SSD | 160 GB SSD |
| **Mechanical and Environmental** | |
| Dimensions | 60.5 mm x 128.7 mm x 213.2 mm (2.35" x 5" x 8.3") |
| Slot Requirements | 1 system slot plus 2 controller expansion slots |
| Weight | 0.9 kg (1.98 lbs) |
| Operating Temp. | 0 to 50°C (32°F to 122°F) (w/ HDD)<br>0 to 55°C (32°F to 131°F) (w/ SSD) |
| Storage Temp. | -20°C to 70°C (-4°F to 158°F) |
| Relative Humidity | 5 to 95%, non-condensing |
| Shock | 30 G, half-sine, 11 ms pulse duration |
| Vibration | Operating: 5 to 500 Hz, 0.21 Grms, 3 axes (w/ HDD)<br>Non-operating: 5 to 500 Hz, 2.46 Grms, 3 axes (w/ HDD) |
| Emissions Compliance | EN 61326-1<br>FCC Class A |
| CE Compliance | Immunity: EN 61326-1 |

## Ordering Information

■ **PXIe-3975**
3U PXI Express Intel® Core™ i5-520E 2.4 GHz system controller with 4 GB memory & 320 GB HDD

■ **PXIe-3975/M8G**
3U PXI Express Intel® Core™ i5-520E 2.4 GHz system controller with 8 GB memory & 320 GB HDD

■ **PXIe-3975/SSD**
3U PXI Express Intel® Core™ i5-520E 2.4 GHz system controller with 4 GB memory & 160 GB SSD

■ **PXIe-3975/M8G/SSD**
3U PXI Express Intel® Core™ i5-520E 2.4 GHz system controller with 8 GB memory & 160 GB SSD

## Cable Accessory



■ **ACL-IEEE488-MD1-A**
25-pin Micro-D to GPIB Cable, 1 Meter Length

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