

PXle-3975

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



Introduction

The ADLINK PXle-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 PXle-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 PXle-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 PXle-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 PXle-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.

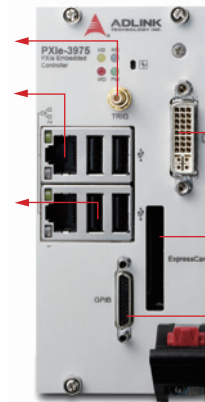
Features

- 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
- OS Information
 - Windows XP x32, Windows 7 x32/x64

Trigger I/O to route trigger to/from PXI trigger bus

Dual GbE ports (one for LAN connectivity and one for LXI instrument control)

Four USB 2.0 ports for peripheral devices and USB instrument control

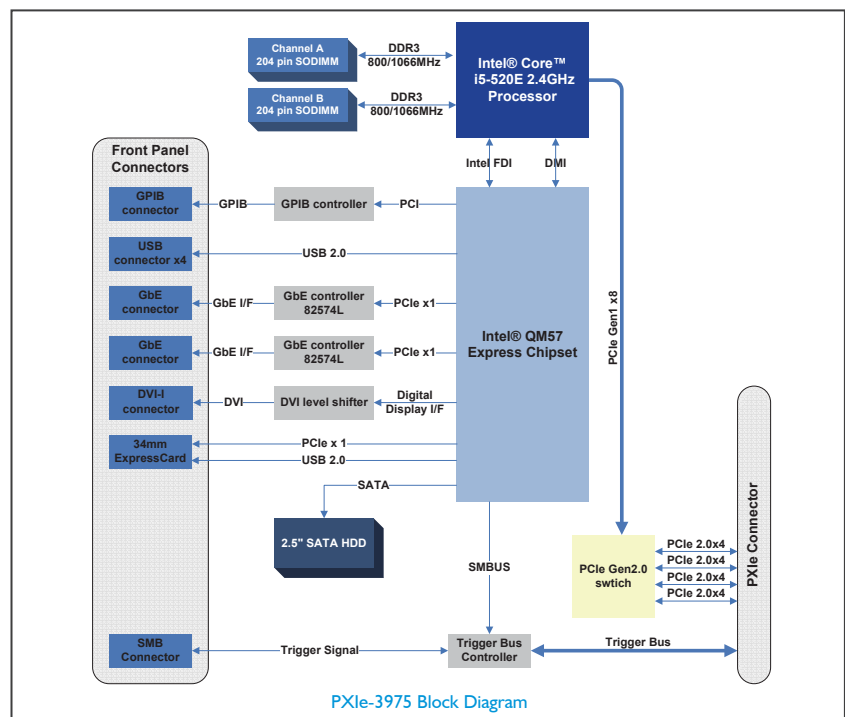


DVI-I connector for DVI (digital) or CRT (analog) display

ExpressCard/34 expansion slot

Micro-D GPIB connector for GPIB instrument control

PXle-3975 Front Panel



PXle-3975 Block Diagram

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 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 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 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) 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) Non-operating: 5 to 500 Hz, 2.46 Grms, 3 axes (w/ HDD)
Emissions Compliance	EN 61326-1 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