

PXI-3950

New-generation 3U PXI™ Intel® Core™2 Duo Controller for Hybrid PXI-based Testing System

Features

- PXI™ specification Rev. 2.2 Compliant
- Intel® Core™2 Duo T7500 2.2 GHz processor for ultimate computing power
- On-board 4 GB 667 MHz DDR2 memory
- Integrated 120GB 7200 RPM SATA hard drive
- One CompactFlash socket for HDD replacement
- Integrated I/O
 - Dual Gigabit Ethernet ports
 - Four USB 2.0 ports
 - Built-in GPIB (IEEE488) controller
 - Two RS-232/422/485 ports
 - DVI-I video connector
 - High definition audio output and input
 - Trigger I/O for advanced PXI trigger function
- Programmable watchdog timer



Introduction

The ADLINK PXI-3950 is a new-generation PXI embedded controllers designed for hybrid PXI-based testing systems. Combining state-of-art Intel® Core™2 Duo T7500 2.2 GHz processor, the latest GME965 chipset, and 4 GB of 667 MHz DDR2 memory, the PXI-3950 delivers ultimate performance for your test and measurement applications.

Hybrid PXI-based testing systems are typically composed of a PXI platform and stand-alone instruments. The PXI-3950 provides plenty of interfaces, including GPIB, USB and COM ports for connecting and controlling instruments. The PXI-3950 also has dual Gigabit Ethernet ports - users can use one port for a LAN connection and the other port for connecting next-generation LXI instruments.

By incorporating Intel® dual-core technology, the PXI-3950 provides two computing engines on a single processor that can execute two independent tasks at the same time in a multi-tasking environment. Combining this superior performance with a variety of instrument interfaces makes the PXI-3950 an ideal solution for your hybrid PXI-based testing system.

Two COM ports,
supports RS232/422/485

Dual GbE ports
One for LAN connectivity
One for LXI instrument
control

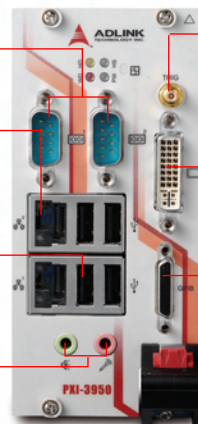
Four USB 2.0 ports
For peripheral devices and
USB instrument control

Intel High Definition Audio
Line-in and speaker out

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

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

Micro-D GPIB connector
for GPIB instrument
control



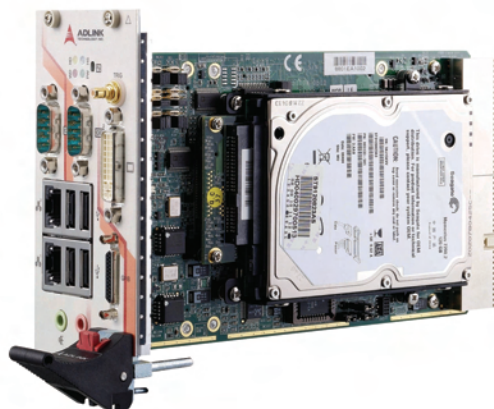
** The capability of addressing 4 GB memory is OS-dependent. A 32-bit operating system may not be able to address a full 4 GB memory space. To utilize the full 4 GB of memory, a 64-bit operating system may be required.*

Notice

This PXI controller implements rear I/O. PXI controllers with rear I/O designed to operate with a matching rear transition module to provide internal or external chassis I/O.

Warning

If this PXI controller is used with a chassis that contains a rear transition module that does not match the controller, the rear I/O functionality may not operate and may cause damage to the PXI controller and/or the rear transition module.



Specifications

Core Features

- Processor
 - Intel® Core™2 Duo T7500 2.2 GHz processor
 - Supports 533/800 MHz front side bus (FSB)
- Chipset
 - Mobile Intel® GME965 Graphic Memory Control HUB
 - Intel® I/O Controller Hub 8 Mobile (ICH8-M)
- Video
 - Mobile Intel® GMA X3100 graphic media accelerator
 - DVI
 - Single channel TMDS via SDVO to DVI controller
 - Supports up to 1600x1200 resolution
 - CRT
 - Analog CRT route to DVI-I connector on the faceplate
 - Supports up to 2048x1536 resolution
 - LVDS (for rear I/O only)
 - Single 18-bit/24-bit LVDS Channel route to rear transition module
 - Supports LCD backlight control
 - DVI-I connector for both digital and analog video signal outputs
- Memory
 - Supports dual channel DDR2 SDRAM, 667 MHz
 - 4GB on-board SODIMM memory

I/O Connectivity

- Hard Drive
 - 120 GB SATA hard drive, 7200 RPM
- Ethernet
 - Dual Gigabit Ethernet controllers
 - INTEL ICH8M+82566 PHY GbE
 - Marvell 88E8053 GbE
 - Two RJ-45 connectors with speed/link/active LED on the faceplate
- USB
 - Four USB 2.0 ports on the faceplate
- GPIB
 - On-board IEEE488 GPIB controller
 - Micro-D 25-pin connector on the faceplate (GPIB cable not included)
- Serial Port
 - Two 16C550 UART compatible COM ports on the faceplate
 - Supports RS-232, RS-422 and RS-485, configurable by jumper setting
- Audio
 - Supports High Definition Audio
 - Two audio jacks on the faceplate (line-in and speaker-out)
- Trigger I/O
 - One SMB connector on the faceplate to route an external trigger signal to/from PXI trigger bus
- CompactFlash™ socket
 - One type II CF Socket, supporting PIO and DMA modes

Physical

- Dimension: 3-slot 3U PXI module
- Slot requirements: 1 system slot and 2 controller expansion slots
- Weight: 0.9 kg

Environment

- Operating temperature: 0° to 55°C
- Storage temperature: -20° to 80°C
- Relative humidity: 5 to 95%, non-condensing

Shock and Vibration

- Functional shock: 30 G, half-sine, 11 ms pulse duration
- Random vibration
 - Operating: 5 to 500 Hz, 0.5 G_{RMS}, 3 axes
 - Non-operating: 5 to 500 Hz, 2.46 G_{RMS}, 3 axes

Certificate

- EMC/EMI: CE, FCC Class A

Cable Accessory



- **ACL-IEEE488-MD1**
 - Connectors: Micro-D 25 pins to IEEE488 24 pins
 - Length: 1 M

Ordering Information

- **PXI-3950**
3U PXI Core™2 Duo T7500 2.2 GHz System Controller with DVI-I/Dual GbE/GPIB, built-in 4GB DDR2 memory and 120 GB SATA HDD
- **ACL-IEEE488-MD1**
25-pin micro-D to GPIB cable, 1 meter length

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**All specifications are subject to change without further notice.*

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