PXI-3950/3920

3U Intel® Core™2 Duo T7500 2.2GHz/ Pentium® M 760 Single-Core Processor-based PXI Controllers

PXI-3950 PXI-3920

Introduction

The ADLINK PXI-3920 and PXI-3950 PXI embedded controllers are based on the Intel® Pentium® M, and Intel® Core™2 Duo and specifically designed for hybrid PXI-based testing systems by providing a rugged and stable operating environment for a variety test and measurement applications.

Hybrid PXI-based testing systems are typically composed of a PXI platform and diversified stand-alone instruments for complex testing tasks. The PXI-3920 and PXI-3950 provide plenty of interfaces, including GPIB, USB, and COM ports, for connecting and controlling instruments. The PXI-3920 and PXI-3950 also provide dual Gigabit Ethernet ports—one for a LAN connection and the other for controlling next-generation LXI instruments.

Combining Intel® Core™2 Duo T7500 2.2 GHz processor, the GME965 chipset, and 4 GB of 667 MHz DDR2 memory, 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. The PXI-3920 is meticulously designed to provide maximum robustness. The CPU and memory chips are soldered on the PCB to increase reliability in shock and vibration prone environments. The aluminum-copper composite heat sink helps to disperse heat uniformly to maintain a stable operating temperature.

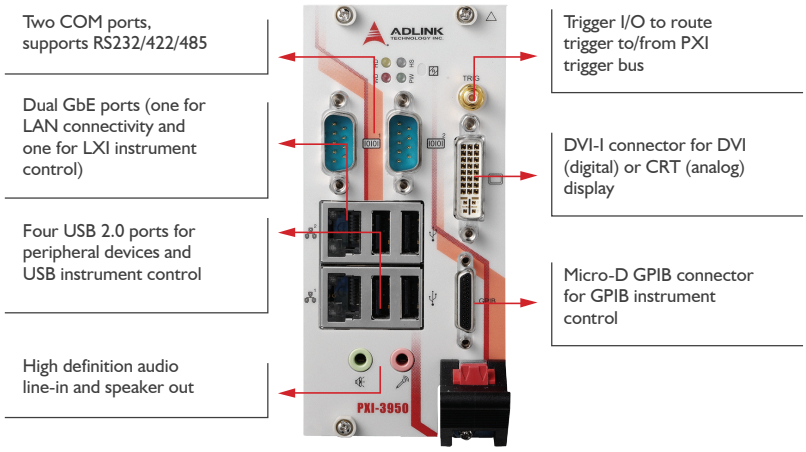
Combining a variety of instrument control interfaces and reliable mechanical and electronic design, the ADLINK PXI-3950 and PXI-3920 are well qualified to meet the needs of your hybrid PXI-based testing systems.

Features

- **PXI™ specification Rev. 2.2 Compliant**
- **Scalable computing power**
  - **Intel® Core™2 Duo T7500 2.2 GHz processor (PXI-3950)**
  - **Intel® Pentium® M 760 2.0 GHz processor (PXI-3920)**
- **On-board DDR2 memory**
  - **Up to 4 GB 667 MHz (PXI-3950)**
  - **512 MB 400/533 MHz soldered (PXI- 3920)**
- **Integrated SATA hard drive**
  - **320 GB 7200 RPM**
- **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 functions**
- **Programmable watchdog timer**

OS Information

- Windows XP x32 (PXI-3920)
- Windows XP x32, Windows 7 x32 (PXI-3950)



PXI-3950 Front Panel

Specifications

Model Name	PXI-3920	PXI-3950
Core Features		
CPU	Intel® Pentium® M 760 2.0 GHz	Intel® Core™2 Duo T7500 2.2 GHz
FSB	533 MHz	800 MHz
Chipset	Intel® 915 GME Graphic Memory Control HUB Intel® I/O Controller Hub 6 Mobile (ICH6-M)	Intel® GME965 Graphic Memory Control HUB Intel® I/O Controller Hub 8 Mobile (ICH8-M)
Memory	512 MB on-board soldered memory One DDR2 SO-DIMM socket for memory expansion Supports dual-channel DDR2 SDRAM, 400/533 MHz	4 GB SO-DIMM memory Supports dual-channel DDR2 SDRAM, 667 MHz
Display		
Chipset	Intel® GMA 900 graphic media accelerator	Intel® GMA X3100 graphic media accelerator
DVI	Single channel TMDS via SDVO to DVI controller up to 1600 x 1200 resolution @ 60 Hz	
CRT	Analog CRT route to DVI-I connector on the faceplate up to 1280 x 1024 resolution	
LVDS (For rear I/O only)	Single 18-bit LVDS channel route to rear transition module Supports LCD backlight control	
Interface	DVI-I connector for digital or analog video signal outputs	
I/O Connectivity		
Ethernet	On board Marvell™ 88E8053 Dual Gigabit Ethernet controllers	One 88E8053 + one Intel® 82566 PHY
	Two RJ-45 connectors with speed/link/active LED on the faceplate	
USB	4 x USB 2.0 on the faceplate	
GPIB	On-board IEEE488 GPIB controller	
	Micro-D 25-pin connector on the faceplate (ACL-IEEE488-MD1-A cable required)	
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 input/output	
	Two audio jacks on the faceplate for line-in/mic-in and speaker-out	
Trigger I/O	SMB connector on the faceplate to route an external trigger signal to/from PXI™ trigger bus	
CompactFlash Socket	Type II CF Socket, supporting PIO and DMA modes	
Storage		
HDD	320 GB SATA hard drive, 7200 RPM	
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°C to 50°C (32°F to 122°F)	
Storage Temp.	-20°C to 80°C (-4°F to 176°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	
	Non-operating: 5 to 500 Hz, 2.46 Grms, 3 axes	
Emissions Compliance	EN 61326-1 FCC Class A	
CE Compliance	Immunity: EN 61326-1	

Ordering Information

- **PXI-3950**
  3U PXI Intel® Core™2 Duo T7500 2.2 GHz system controller with 4 GB memory & 320 GB HDD
- **PXI-3950/M2G**
  3U PXI Intel® Core™2 Duo T7500 2.2 GHz system controller with 2 GB memory & 320 GB HDD
- **PXI-3920**
  3U PXI Intel® Pentium® M 760 2.0 GHz system controller with 512 MB memory & 320 GB HDD
- **PXI-3920/M1.5G**
  3U PXI Intel® Pentium® M 760 2.0 GHz system controller with 1.5 GB memory & 320 GB HDD

Cable Accessory

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