

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

Two COM ports, supports RS232/422/485

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

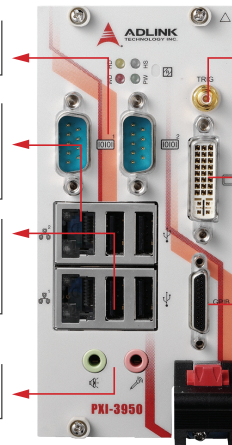
Four USB 2.0 ports for peripheral devices and USB instrument control

High definition audio line-in and speaker out

Trigger I/O to 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



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 Two RJ-45 connectors with speed/link/active LED on the faceplate	One 88E8053 + one Intel® 82566 PHY
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-MDI-A**
25-pin Micro-D to GPIB Cable, 1 Meter Length