Introduction

The ADLINK PXI-3900 series of next-generation PXI™ embedded controllers is based on the Intel® Celeron® M, Intel® Pentium® M, or 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-3900 series provides plenty of interfaces, including GPIB, USB, and COM ports, for connecting and controlling instruments. The PXI-3900 series also provides dual Gigabit Ethernet ports—one for a LAN connection and the other for controlling next-generation LXI instruments.

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 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 and PXI-3910 are 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-3900 series is well qualified to meet the needs of your hybrid PXI-based testing systems.

Notice

These PXI™ controllers implement rear I/O. PXI™ controllers with rear I/O are designed to operate with a matching rear transition module which provides internal or external chassis I/O.

Warning

If these PXI™ controllers are 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 or the rear transition module.

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)
  - Intel® Celeron® M 373 1.0 GHz processor (PXI-3910)
- On-board DDR2 memory
  - up to 4 GB 667 MHz (PXI-3950)
  - 512 MB 400/533 MHz soldered (PXI-3920/3910)
- Integrated SATA hard drive
  - 120 GB 7200 RPM (PXI-3950)
  - 80 GB 5400 RPM (PXI-3920/3910)
- 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

Next-generation 3U PXI™ Controllers for Hybrid PXI-based Testing Systems
## Specifications

<table>
<thead>
<tr>
<th>Model Name</th>
<th>PXI-3910</th>
<th>PXI-3920</th>
<th>PXI-3950</th>
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</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Celeron® M 373 1.0 GHz</td>
<td>Intel® Pentium® M 760 2.0 GHz</td>
<td>Intel® Core™2 Duo T7500 2.2 GHz</td>
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<tr>
<td><strong>FSB</strong></td>
<td>400 MHz</td>
<td>533 MHz</td>
<td>800 MHz</td>
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<tr>
<td><strong>Chipset</strong></td>
<td>Intel® 915 GME Graphic Memory Control HUB</td>
<td>Intel® I/O Controller Hub 6 Mobile (ICH6-M)</td>
<td>Intel® I/O Controller Hub 6 Mobile (ICH6-M)</td>
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<tr>
<td><strong>Memory</strong></td>
<td>512 MB on-board soldered memory</td>
<td>One DDR2 SO-DIMM socket for memory expansion</td>
<td>Supports dual-channel DDR2 SDRAM, 4 GB SO-DIMM memory</td>
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<tr>
<td><strong>Display</strong></td>
<td>Intel® GMA 900 graphic media accelerator</td>
<td>Intel® GMA X1000 graphic media accelerator</td>
<td>Supports dual-channel DDR2 SDRAM, 667 MHz</td>
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<tr>
<td><strong>I/O Connectivity</strong></td>
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<tr>
<td><strong>Hard Drive</strong></td>
<td>80 GB SATA hard drive, 5400 RPM</td>
<td>120 GB SATA hard drive, 7200 RPM</td>
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<tr>
<td><strong>Ethernet</strong></td>
<td>Two RJ-45 connectors with speed/link/active LED on the faceplate</td>
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<tr>
<td><strong>USB</strong></td>
<td>4 x USB 2.0 on the faceplate</td>
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<tr>
<td><strong>GPIB</strong></td>
<td>On-board IEEE488 GPIB controller</td>
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<tr>
<td><strong>Serial Port</strong></td>
<td>Micro-D 25-pin connector on the faceplate (ACL-IEEE488-MD1 cable required)</td>
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<tr>
<td><strong>Audio</strong></td>
<td>Supports high definition audio input/output</td>
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<tr>
<td><strong>Trigger I/O</strong></td>
<td>Dual 18-bit UDS channel route to rear transition module</td>
<td>Supports LCD backlight control</td>
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<tr>
<td><strong>CompactFlash Socket</strong></td>
<td>Supports LCD backlight control</td>
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## Ordering Information

- **PXI-3910**
  3U PXI Core™ 2 Duo T7500 2.2 GHz System Controller with 4 GB Memory & 80 GB HDD

- **PXI-3910/M2G**
  3U PXI Core™ 2 Duo T7500 2.1 GHz System Controller with 2 GB Memory & 120 GB HDD

- **PXI-3920**
  3U PXI Pentium® M 760 2.0 GHz System Controller with 512 MB Memory & 80 GB HDD

- **PXI-3920/M1.5G**
  3U PXI Pentium® M 760 2.0 GHz System Controller with 1.5 GB Memory & 80 GB HDD

- **PXI-3950**
  3U PXI Celeron® M 373 1.0 GHz System Controller with 512 MB Memory & 80 GB HDD

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

## Cable Accessory

![Cable Accessory](image-url)