

PXI-3800 Series

3U PXI Intel® Pentium® M System Controller with VGA/GbE/CF

Features

- PXI specifications Rev. 2.2 compliant
- Design for Pentium® M processor, FSB 400 MHz, CPU frequency up to 2.0 GHz
- Two 200-pin DDR SO-DIMM sockets supporting up to 2 GB RAM
- One 44-pin EIDE (primary IDE) with build-in 2.5 low-profile HDD (40 GB, min.)
- Two CompactFlash interfaces for HDD and FDD replacement; CF2 supports hot swapable CF card functionality
- Built-in two USB 2.0 ports, two serial ports (RS-232/422/485) and one parallel port on the front panel
- One AC97 stereo audio output on the front panel
- One TRIG I/O on the front panel for advanced PXI trigger function
- VGA output on the front panel supporting 2048 x 1536 resolution
- One 10/100/1000 Mb Ethernet port by Intel® 82545EM controller
- Programmable watchdog timer



PXI-3800

Introduction

ADLINK PXI-3800 is the state-of-the-art 3U PXI controller in the ADLINK PXI product line. This product is designed to meet the highest performance requirements for embedded computing. The PXI-3800 system controller complies with PXI specifications Rev. 2.2 and features many new technologies such as up to 2.0 GHz Pentium® M CPU support, hot swappable CompactFlash card, USB 2.0 ports, and gigabit Ethernet.

By using an Intel® Embedded Pentium® M CPU and Intel® 855GME chipset, the PXI-3800 provides both long life and excellent driver support to meet the majority of industrial applications. The PXI-3800 supports mainstream operating systems such as Windows 2000/XP/2003 and Linux. In addition to its rugged, industrial package, the PXI-3800's extraordinary reliability, high computing performance, and low power consumption make it ideal for test and measurement applications in harsh environments.

Notice:

This PXI™ controller implements rear I/O. PXI™ controllers with rear I/O were designed to operate with a matching rear transition module which provides 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 or the rear transition module.

Specifications

Core Features

Processor

- Intel® Pentium® M processor, CPU frequency up to 1.8 GHz
- Supports 266/333/400 MHz front side bus (FSB)

Chipset

- Intel® 855GME Graphic Memory Controller Hub (GMCH)
- Intel® 6300ESB I/O Controller Hub

Video

- Integrated into 855GME GMCH
- 350 MHz integrated 24-bit RAMDAC supports analog display pixel resolution up to 1600x1200 @ 85 Hz and 2048x1536 @ 75 Hz
- One analog VGA DB-15 connector on the faceplate

Memory

- Two 200-pin DDR SO-DIMM sockets support up to 2 GB memory

I/O Connectivity

IDE ports

- One 44-pin ATA-100 EIDE interface for hard drive
- One 50-pin CompactFlash type II socket

Ethernet

- On-board Intel® 82545EM Gigabit Ethernet controller
- RJ-45 connector with speed/link/active LED on the faceplate

USB

- Two USB 2.0 ports on the faceplate

Serial Port

- Two 16C550 UART compatible COM ports on the faceplate
- COM1 is RS-232/422/485 jumper selectable

LPT Port

- One high-speed bi-directional SPP/EPP/ECP parallel port

PS2 Keyboard/Mouse

- One PS2 KB/MS connector on the faceplate

Audio

- AC97 audio output on the faceplate

Trigger I/O

- One SMB connector on the faceplate to route an external trigger signal to/from PXI trigger bus

CompactFlash socket

- Two CompactFlash type II sockets. CF1 is based on internal primary IDE interface. CF2 is hot-swappable interface on the faceplate

Physical

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

Environment

- Operating temperature: 0°C to 50°C
- Storage temperature: -20°C to 80°C
- Relative humidity: 5 to 95%, non-condensing

Shock and Vibration

- Functional shock: 15 G, half-sine, 11 ms pulse duration
- Random vibration
Operating: 5 to 500 Hz, 0.5 GRMS, 3 axes
Non-operating: 5 to 500 Hz, 1.88 GRMS, 3 axes

Certificate

- EMC/EMI: CE, FCC Class A

Ordering Information

- **PXI-3800**
3U PXI system controller with Intel® Pentium® M 1.6 GHz, 512 MB DDR RAM, 40 GB HDD
- **PXI-3800/CM13**
3U PXI system controller with Intel® Celeron® M 1.3 GHz CPU, 512 MB DDR RAM, 40 GB HDD
- **PXI-3800/PM18**
3U PXI system controller with Intel® Pentium® M 1.8 GHz Dothan CPU, 512 MB DDR RAM, 40 GB HDD
- **PXI-3800/PM18+**
3U PXI system controller with Intel® Pentium® M 1.8 GHz Dothan CPU, 2 GB DDR RAM, 80 GB HDD (5400RPM)