EuroTecH

EMBEDDED-PC PC/104-Plus MODULES

CPU-1464
PentiumIII 800MHz Fanless SBC with Gigabit & Fast Ethernet (RoHS)

Features

Architecture:
PC/104-Plus compliant

Processor:
Intel ® PentiumIII ® 800MHz, 512KB L2 cache, 133MHz FSB

Chipset:
Intel® 815E

Memory:
256MB SDRAM soldered on board

Supported Operating Systems:
WinCE®, WinXPE® and Linux®

BIOS Flash:
1MB Flash EPROM

Interfaces:
- IDE Controller UltraATA
- Serial ports:
    - 1x RS-232
    - 1x RS-232/422/485
- 4x USB 1.1 ports
- Gigabit Ethernet (Intel® 82541PI chipset)
- Fast Ethernet (Intel® 82562ET chipset)
- Video Controllers:
    - Analog VGA output
    - Digital LVDS output
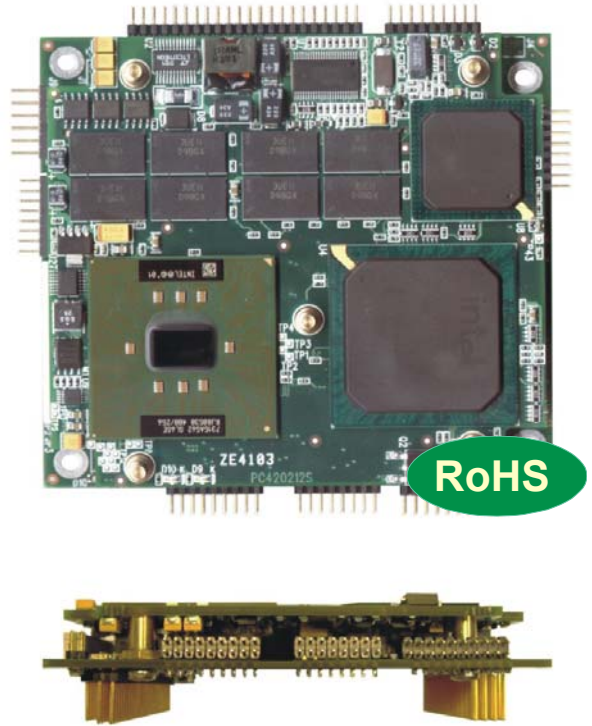- Auxiliary Power
- AC97
- Keyboard and Mouse

Bus:
- PC/104-Plus (PCI)
- PC/104 (ISA)

Watchdog:
2-255 seconds / minutes

Power Supply:
Single +5V DC

RoHS

General Description

The CPU-1464 is an embedded RoHS compliant board based on two modules: a mezzanine CPU module combined with a PC/104-Plus form factor carrier.

The mezzanine CPU module features the processor and its Intel® 815E chipset with 133MHz maximum bus frequency. The processor is the Intel® PentiumIII ® 800MHz. The system comes with 256MB SDRAM soldered onboard. No active cooling is required to operate within the standard and extended temperature ranges. The carrier implements all the connections to the external world, including 4 USB ports, 1 Gigabit Ethernet interface (1000Mbps), Ethernet 10/100MB, Analog VGA and Digital LVDS outputs, 2 Serial ports, 1 AC97 audio interface, Auxiliary Power, Keyboard and Mouse connectors and an IDE controller that supports any type of IDE Flash devices (Disk-On-Module, Compact Flash and Flash Disk). The carrier also performs the connections for the ISA and PCI bus enabling the CPU-1464 to stack on top of a PC/104-Plus system. The carrier provides support for Watchdog management and Real Time Clock (external backup battery) and can be customized to match specific customer needs.

The BIOS for the module is embedded and is located in a 1MB Flash EPROM, it is fully re-programmable onboard. The set-up parameters are saved in Flash to allow the module to operate without a battery.

Embedded Enhanced BIOS

- The Eurotech BIOS with enhanced embedded features can be easily customized and upgraded to match the specific system configuration.

- Watchdog management.

- Set-Up in Flash in order to avoid Set-Up corruption in field.

- Virtual Peripheral Support (V.P.S.): this mode allows to bootstrap from the parallel or serial ports and redirect Keyboard, Video, Floppy Disk on the serial/parallel ports before booting the Operating System. It is also possible to redirect any of these peripherals as default setting.

- Etherboot support: this feature allows the system to boot up from a LAN connection for diskless operation.

Physical Characteristics

- **Dimensions:**   90 x 96 mm (3.6" X 3.8")
- **Height:**   18.6 mm (0.7")
- **Power supply:**   Single +5V DC +/- 5%
- **Power consumption:**   15.0 W typical
- **Operating Temperature:**   0 ~ + 50 °C (standard)
                              -40 ~ +85 °C (extended)
- **Humidity:**   Up to 95% non-condensing

Options

- Custom BIOS with embedded features

- Extended operating temperature range

- Custom carrier

- Conformal coating

- Custom Connectors

Accessories

- RJ45 10/100 Ethernet adapter

- RJ45 Gigabit Ethernet adapter

- AC97 adapter

- USB adapters

- 2mm to 2.54mm IDE cable

- Cable Set Kit

- Development Kit

Power Management

- Temperature monitor with hardware thermal management circuit

- Power fail NMI (safe operation between 4.75V and 5.25V)

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