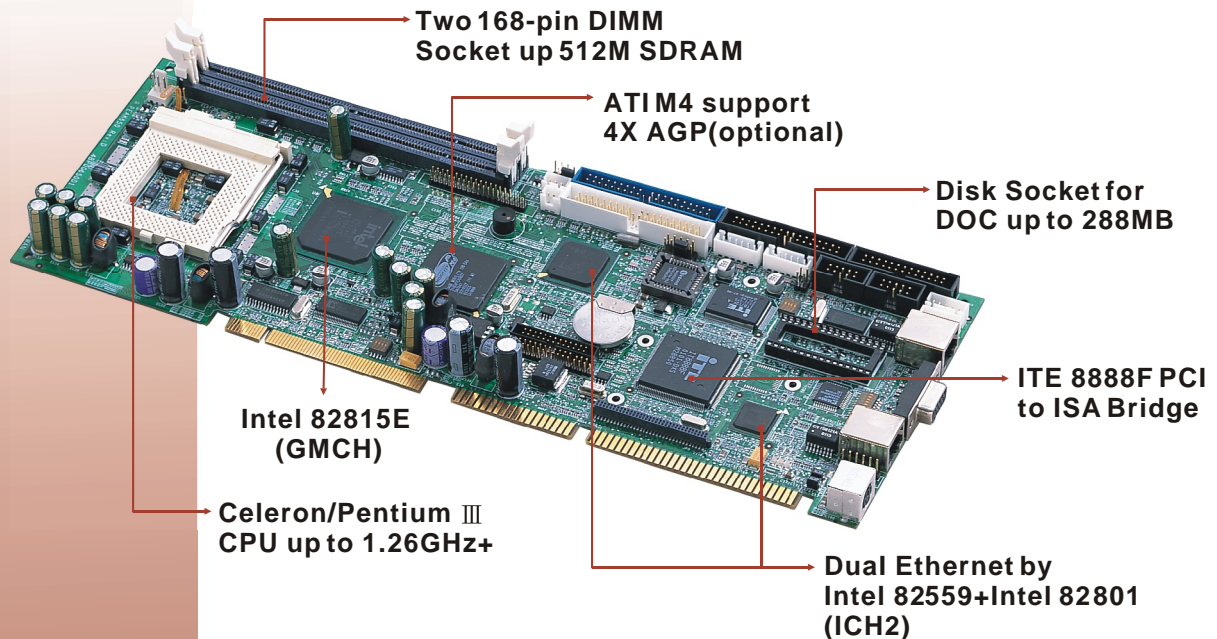


PEAK 650VL2

Full-size Socket 370 Celeron/Pentium III CPU Card



Introduction

The PEAK 650 series is the most powerful full-size single board computer that combines Intel Celeron/ Pentium III CPU running at 100/133 MHz FSB up to 1.26 GHz and Intel 815E chipset. Integrated internal graphics, LAN, and support for four USB ports, Ultra DMA 66 /100 IDE interface. Additional features include one more dual channel Ethernet to meet the network requirement and supporting DRAM maximum up to 512MB with 100/133MHz SDRAM interface. With on-board NEXCOM proprietary PCI interface, the optional EBK SCSI 2 module designed with Adaptec AIC-7890 Ultra 2 SCSI controller or the EBK SCSI 160D module designed with Adaptec AIC 7899 Ultra 160 SCSI controller makes the PEAK 650 series model a full function single board computer.

Feature

- ◆ Intel Socket 370 Celeron/Pentium III CPU running at 66/100/133MHz FSB up to 1.26 GHz.
- ◆ Support SDRAM up to 512MB(Max.), with 100/133MHz SDRAM interface.
- ◆ Dual Channel Ethernet by Intel 82801 (ICH2) chipset integrated LAN controller and Intel 82559 Ethernet Controller, support Alert-on-LAN.
- ◆ Intel 82815 (GMCH) chipset integrated Graphics controller.
- ◆ On Board Optional ATI Rage Mobility M4 3D VGA accelerator, support 4X AGP.



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PEAK 650VL2

Specifications

System Architecture

- Full size SBC with PCI/ISA Goldenfinger
- Intel Socket 370 Celeron/Pentium III with 66/100/133MHz FSB
- PCI V2.1 compliant
- PICMG 1.0 (Rev.2.0) compliant

CPU Support

- Intel Brand New Socket370 FC-PGA Celeron /Pentium III CPU with 128/256K cache on die, running at 66/100/133MHz FSB up to 1.26GHz
- Support streaming SIMD instruction

Main Memory

- Support SDRAM up to 512MB (Max.)
- 168 pin DIMM socket x 2
- Support 100/133MHz SDRAM interface

BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- Advanced Configuration & Power Interface support
- Jumperless for CPU FSB
- 2M bits flash ROM, upgradeable to 4M bits

Chip Set

- Intel 815E chipsets
 - 82815x 1 Graphics and Memory Controller Hub (GMCH)
 - 82801x 1 I/O Controller Hub (ICH2)
 - 82802x 1 Firmware Hub (FWH)
- ITE 8888F x 1 PCI to ISA Bridge

On Board VGA

- Intel 82815 (GMCH) chipset integrated with Graphics controller
- Hardware motion compensation assist for software MPEG/DVD decode
- 15 pin CRT connector x 1
- Optional TFT LCD/DSTN LCD/CRT control module through proprietary connector

On Board optional VGA

- ATI Rage Mobility M4 3D VGA accelerator. 4X AGP
- Fully PC 98 and PC 99 Compliant.
- Integrated 8MB of SDR Memory, upgradeable to 16MB
- 15 pin CRT connector x 1, DVI interface connector x 1

On Board LAN

- Dual channel Ethernet support
- Intel 82801 (ICH2) chipset integrated LAN controller
- Intel 82559 Single Ethernet controller
- Alert-on-LAN by Intel 82801 (ICH2)
- 10 Base T/100 Base TX support, full duplex
- Compliant with PCI V2.1, IEEE 802.3, IEEE 802.3U
- Drivers support : DOS/Windows, Windows 95/98/2000, Windows NT4.0, Netware, SCO Open Server 5.0, Linux.
- RJ45 connector x 2

On Board Nexcom proprietary PCI interface

- Reserved 32bit PCI interface for EBK SCSI / EBK SCSI2 / EBK SCSI 160D module

On Board I/O

- ITE 8712 Enhanced Super I/O on board
- SIO x 2, with 2x16C550 UARTs, 10 pin header x 2, Optional Rs422/485x 1
- PIO x 1, bi-directional, EPP/ECP support, 26 pin connector x 1
- Floppy Disk controller : 5.25" 360KB/1.2MB, 3.5" 720KB/1.2MB/1.44MB/2.88MB support, 34 pin connector x 1

- On chip enhanced IDE x 2, PIO up to mode 4, DMA master up to mode 2, Ultra DMA/66/100 support, 40 pin connector x 2, total 4 E-IDE devices support
- On chip Keyboard, mouse controller, 5 pin connector x 1 (for other keyboard) : 6 pin mini DIN connector x 1, for PS/2 keyboard/mouse
- On board USB port x 4 (6 pin header x 2)
- On Board buzzer x 1
- On board 2 pin header for I²C
- On board 5 pin header for IrDA
- On Board 2 pin header for reset SW, 4 pin for speaker, 5 pin for keylock, 2 pin power SW

ACPI Function

- Soft Power off
- Wake On LAN
- Wake On Keyboard
- Wake On Ring
- RTC alarm wake up

On Board Solid State Disk Socket

- On board reserved socket for DOC of M-systems : 2MB~288MB, etc
- Power header beside IDE connector to support DOM

System Monitor

- Derived from SuperIO ITE 8712 to support system monitor.
- 8 voltage (For +3.3V, +5V, -5V, 5V STBY, +12V, -12V, and Vcore x 2)
- One Fan speed (For CPU)
- Two temperature
- Drivers support : Windows 95/98, Windows NT4.0/2000, Linux

Bracket Connector

- PS/2 connector x 1 (for Keyboard/Mouse)
- RJ45 connector x 2 (for LAN)
- 15 pin D-type connector x 1 (for VGA)
- Optional bracket for 2x COM ; PIO + COM ; USB x2 + DVI

ISAMAX Support

- Maximize ISA signals to support ISA cards up to 20

Watchdog Timer

- 1,2,4...64 seconds time-out intervals

Dimensions

- 338.58mm(L) x 122mm(W)

Power Requirements

- TBD for (Max. Typical)

Environments

- Operating temperatures : 0°C to 60°C
- Storage temperatures : -20°C to 80°C
- Relative humidity : 10% to 90% (Non-condensing)

Certification

- CE Class A
- FCC Class A

Model Available

PEAK 650VL2

- Full-size Socket 370 Celeron/Pentium III CPU card w /VGA/Dual LAN

PEAK 650VL2B

- Full-size Socket 370 Celeron/Pentium III CPU card w /VGA/Dual LAN upgradable with EBK Module

PEAK 650M16

- Full-size Socket 370 Celeron/Pentium III CPU card w /ATI M4 VGA w 16MB /LAN, upgradable with EBK Module



The Digital Infrastructure

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