Portwell ROBO-8610VL

Advanced PICMG form factor Single Intel Pentium® III Processors Single Board Computer with High capacity high speed main memory, High Performance AGPx2 VGA and Fast Ethernet integrated

Highlights:

ROBO-8610VL is based on VIA Appolo 133 chipset and latest high performance processor, Intel Socket type Pentium® III Processor, running at up to 1.26GHz with 133Mhz FSB that built on Intel ® micron processor technology. With VIA's chipset – Appolo Pro133T, ATI high-performance graphic controller Mobility M1 AGP and Intel 82559 fast Ethernet connection enable Portwell's ROBO-8610VL to provide most versatile and best cost performance rated SBC in the market.

All in all, ROBO-8610VL was designed to meet all kind of applied computing application. Not only for Internet applications needs for high computing performance and advanced LAN system but also for those graphic intensive application like Medical equipments and Geographic data analysis

It's compact design with industry PICMG standard form factor make it the best solution for high density server. High reliability and easy-to-maintain nature (lower MTTR) meet high-availability need of Mission critical application.

Features

- Support Intel Pentium® III (Tualatin)
- Single processors
- VIA Pro133T
- SDRAM memory up to 1.5GB(PC133) with ECC function
- ATI Mobility with 8MB VRAM
- Intel 82559
- Proprietary PCI connector for expansion (optional daughter board provided, such as Ultra-160 SCSI or Fast Ethernet)
- Dual EIDE, Dual Serial, Parallel port, USB port
- Watchdog Timer
- System hardware monitoring
- Pure full-size All-In-One SBC with PICMG 1.0 Rev 2.0 compliant
- Fully complies with PCI Bus spec. V2.1

Specification

Processor Support

One Intel Pentium III processors for Socket370

Portwell ROBO-8610VL DATASHEET

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Specification subject to change without notice

Front Side Bus

133/100Mhz

Chipset

VIA VT82C694T, VT82C686B chipset

Memory

PC133/100 SDRAM

Memory capacity: 1.5GB(PC133)

ECC support

Memory Module Form Factor: 168-pin DIMM

DIMM Modules: 3 maximum

BIOS

256/512 KB flash ROM with easy upgrade function

ACPI, DMI, Green function Plug and Play Compatible

Bus Support

16-bit ISA-AT Bus (8.33 MHz), 64 mA high driving capacity 32-bit PCI (33MHz)

On board AGP Graphics

ATI Mobility AGP x2 VGA 8 Mbyte Display Cache DSUB-15 VGA connector

1280 X 1024 256 colors at refresh rates 60Hz

Standard I/O

Two EIDE Ultra DMA100 (100 Mbytes/sec)

Floppy Drive Controller for 1.44 MB, 1.2 MB, floppy drives.

Dual 16C550 Compatible Serial port

Parallel Port with bi-directional, EPP and ECP

Three USB ports One IrDA port

PS/2 Keyboard/Mouse

Single 6-pin mini-DIN Keyboard/mouse connector on rear bracket Connected both Keyboard and mouse through attached Y-cable One additional 5-pin header connector for external keyboard connection through Portwell back plane

Fast Ethernet 10/100 Base -T on board

Intel 82559 PCI Fast Ethernet Controller RJ-45 connector located at rear panel

Supports IEEE 802.3 auto-negotiation algorithm of full-duplex and half-duplex operation for 10Mb/s and 100Mb/s (NWAY)

Ultra 160 SCSI (Optional)

Adaptec AIC 7892 Single channel Ultra 160 SCSI controller

68-pin Ultra SCSI connector

Optional daughter board through proprietary connector (PCI bus)

Disk on Chip

Socket for M-System DiskOnChip Connected to 26-pin shrouded header

Watchdog Timer

Programmable via software from 0.5 sec to 254.5 min

System Hardware Monitor

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On board temperature and voltages monitoring

Beep alarms for field fan out, over/under voltage of DC voltages, and over temperature threshold.

Connectors on rear bracket

One mini-DIN for keyboard/mouse

One USB port

One DSUB-15 for VGA connector

One RJ45

Physical and Environmental

Dimension (L X W): 338.5mm X 122mm

Operating Temperature : 0 – 55 degree C; Relative Humidity : 5% to

95%, non-condensing

Power Requirements

+5 V, 10A

+12 V, 80mA

-12 V, 20mA