➤ SBC-E7501-VEG2
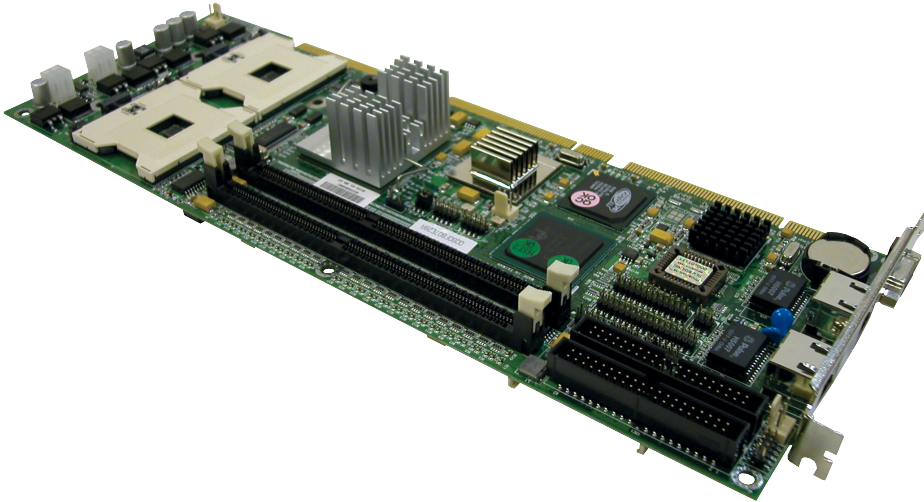
➤ Dual Intel® Xeon™ dual bus PICMG 1.2 (ePCI-X) SHB

The SBC-E7501-VEG2 is a high end PICMG 1.2 SBC-based on an Intel E7501 chipset with 533MHz system bus. The combination of dual Intel Xeon processors, optimized Intel NetBurst™ micro-architecture and Hyper-Threading technology creates a balanced platform with unparalleled price-performance, scalability and flexibility. Coupled with the dual port Intel 82546EB Gigabit controller, the board is a synergy of high computing and communication power to adapt to the diverse environment of medical/laboratory, industrial control and automation, instrumentation, data acquisition, transportation monitoring, COTS defense/aerospace and communication markets.

The SBC-E7501-VEG2 utilizes dual channel DDR 266/200 memory to tremendously accelerate the speed of the data transaction, and is capable of supporting up to 4GB of registered DDR 266/200 ECC memory. Moreover, the board offers two independent PCI-X buses for further I/O expansion. The I/O bandwidth of the PCI-X bus delivers high volumes of data traffic created by the Gigabit Ethernet, SCSI and image processing. With a dual independent bus design, it is flexible enough to accommodate legacy add-on cards with lower bus speeds without sacrificing the performance of other high-speed add-on cards running in another bus.

➤ **Single or dual Intel Xeon processor(s)**

➤ **400/533MHz front side bus speed**

➤ **Intel E7501 MCH and ICH3-S chipset**

➤ **Up to 4GB of ECC DDR266/200 SDRAM**

➤ **Dual Gigabit Ethernet**

➤ **ATI® Rage XL graphic controller, 8MB DDR SDRAM**

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➤ SBC-E7501-VEG2 - Technical Specifications

Processor
• Single or dual Intel® Xeon™ processor(s), 604-pin @ 533/400MHz front side (system) bus speed (603-pin Xeon supported)

Dimensions (D x H)
• 13.3 x 4.8-inch (338 x 122mm)

Chipset
• Intel E7501 MCH and ICH3-S

Bus
• Follows PICMG 1.2 Rev 1.0 standard (dual PCI-X buses)
• Fully complies with PCI-X addendum to the PCI local bus specification v1.0
• PCI IDE interface supporting two enhanced IDE ports up to four HDD devices with PIO mode 4 and Ultra DMA/33/66/100 mode transfer and bus master feature

L2 Cache
• 512k built-in Intel Xeon processor

Memory
• Two DIMM sockets supporting up to 4GB of registered ECC DDR 266/200 SDRAM
  Note: Interleaved memory; requires memory modules to be installed in pairs.
  DDR 266 must be used with 533MHz FSB speed processors.

I/O

Floppy Drive Interface
• Supports one FDD port up to two floppy drives and 5.25-inch (360k, 1.2MB), 3.5-inch (720k, 1.2MB, 1.44MB, 2.88MB) diskette format and 3-mode FDD

Serial Ports
• Supports two high-speed 16C550 compatible UARTs with 16-byte T/R FIFOs

Parallel Port
• Supports one parallel port with SPP, EPP and ECP modes

USB
• Supports four USB 1.1 ports for high-speed I/O peripheral devices

PS/2 Mouse and Keyboard Interface
• Supports PS/2 mouse/keyboard connection by Y-cable separation

Auxiliary I/O Interfaces
• System reset switch, external speaker, keyboard lock, Ethernet access, LED and HDD active LED, etc.

Real Time Clock/Calendar (RTC)
• Supports Y2K real time clock/calendar with battery backup for 7-year data retention

Watchdog Timer
• Supports Watchdog timer function through software programming for enable/disable and interval setting
• Generate system reset

CompactFlash™ Socket
• True IDE mode, compatibles with the ATA/ATAPI-4 specification
• One Type II CompactFlash socket on secondary IDE channel supporting up to 1GB memory
• Bootable for no drives on primary channel

VGA Display
• ATI® Rage XL graphic controller works in combination with a 8MB DDR-SDRAM
• Display resolution up to 1600 x 1200 @ 85Hz

Onboard Gigabit Ethernet
• Intel 82546EB PCI-X dual Gigabit Ethernet controller

Cooling Fan Power Connector
• Supports three 3-pin connectors for CPU and system fans

System Monitoring Feature
• Monitors CPU temperature and major power sources, etc.

Bracket
• Supports dual Ethernet port with two indicators (ROBO-8820VG2/VG2H), one and one CRT port

CPU Cooler

Dimension (W x H x D)
• 4.4 x 1.6 x 4.9-inch (112 x 41 x 124mm)

Fan Speed
• 1000RPM

Heat Sink Material
• Copper

Rated Voltage
• 12VDC

Thermal Resistance
• 0.395

Weight
• 2.1lbs (970g)

BIOS
• Phoenix (Award) system BIOS with 4MB FLASH ROM with easy upgrade function ACPI, DMI, green function and Plug-n-Play compatible

Power Requirement
• +12V (CPU1) @ 3.7A
• +12V (CPU2) @ 2.8A
• +12V (system) @ 1.2A
• +5V (system) @ 3.1A
• +3.3V (system) @ 2.9A

Environmental

Operating Temperature
• -5 ° to 50 °C (23 ° to 122 °F)

Non-Operating Temperature
• -20 ° to 80 °C (-4 ° to 176 °F)

Humidity
• 0 to 95% (RHNC)

EMI
• FCC, Class A
• UL

OS Support
• Windows®2000/XP

Support
• Superior pre- and post sales technical support
• 2-year limited warranty

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