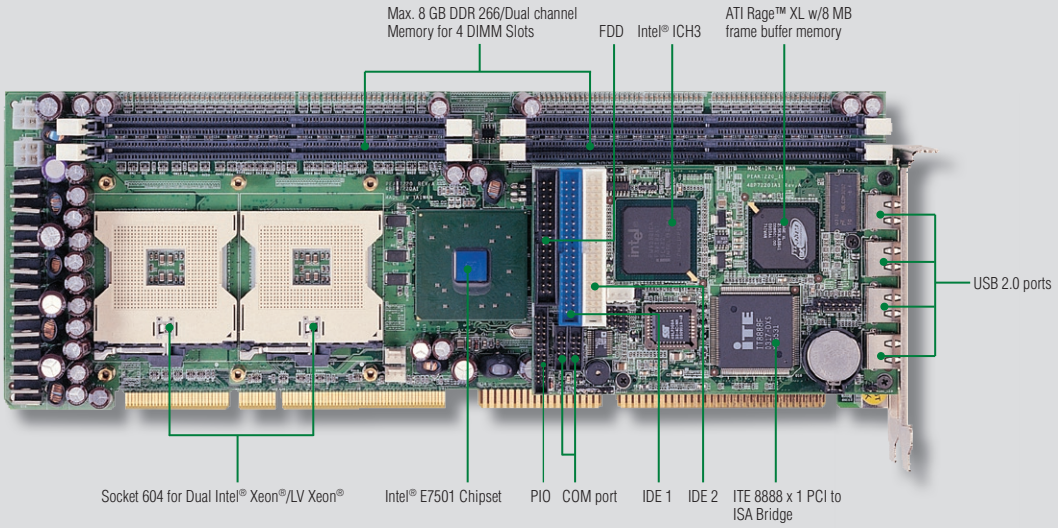
PEAK 7220VL2G

Intel® Socket 604 Dual Xeon®/ LV Xeon® Processors up to 2.8 GHz with 400/ 533 MHz FSB



Main Features

- **Socket 604 for Dual Intel® Xeon®/LV Xeon® Processors up to 2.8 GHz with 400/533 MHz FSB**
- **184-pin DIMM x 4 , Supports DDR 200/266 SDRAM Memory up to 8 GB**
- **Intel® E7501/P64H2 Chipsets**
- **ATI Rage™ XL VGA, 8 MB Frame Buffer Memory**
- **2 x Intel® 82545GM Gigabit Ethernet**
- **Customized 2U Heatsink/Fan for Dual Xeon processors**

Product Overview

The PEAK 7220VL2G is a full-size SBC featuring socket 604 Dual Intel® Xeon® LV Xeon® processors with 400/533 MHz FSB speed up to 2.8 GHz and Hyper-Threading technology. The PEAK 7220VL2G also supports LV Xeon® processors up to 2.4 GHz.

The PEAK 7220VL2G incorporates Intel® E7501 and ICH3-S chipsets, which supports registered ECC DDR 200/266 MHz of memory up to 8 GB maximum. The Intel® South Bridge ICH3-S manages IDE, parallel, floppy, and other versatile I/O ports such as a serial port, four USB ports, two Gigabit LAN ports, audio interface and more. With Dual Intel® Xeon® processors and versatile I/O ports, the PEAK 7220VL2G offers the supreme performance for the most demanding industrial applications.

Specifications

CPU Support

- Supports Socket 604 Dual Intel® Xeon®/LV Xeon® processors up to 2.8 GHz with 400/533 MHz FSB or LV Xeon® up to 2.4 GHz with 400/533 MHz FSB
- 2 x On-board intelligent switching type power regulator
- Supports streaming SIMD instruction
- Supports uni-processor implementation
- Supports Hyper-Threading technology

Main Memory

- Four 184-pin DIMM sockets for up to 8 GB Registered ECC DDR 200/266 SDRAM
- Support twos 64-bit DDR channels

Chipset

- Intel® E7501
- Intel® ICH3-S (82801CA)
- Intel® P64H2 (82870P2)
- Intel® Firmware Hub (FWH)

BIOS

- Award System BIOS
- Plug & Play support
- Advanced Power Management support
- ACPI 2.0 compliant
- 8 Mbit flash ROM

On-board LAN

- 2 x Intel® 82545EM (82545GM for RoHS Model) Gigabit Ethernet controllers
- 2 x RJ45 with LED

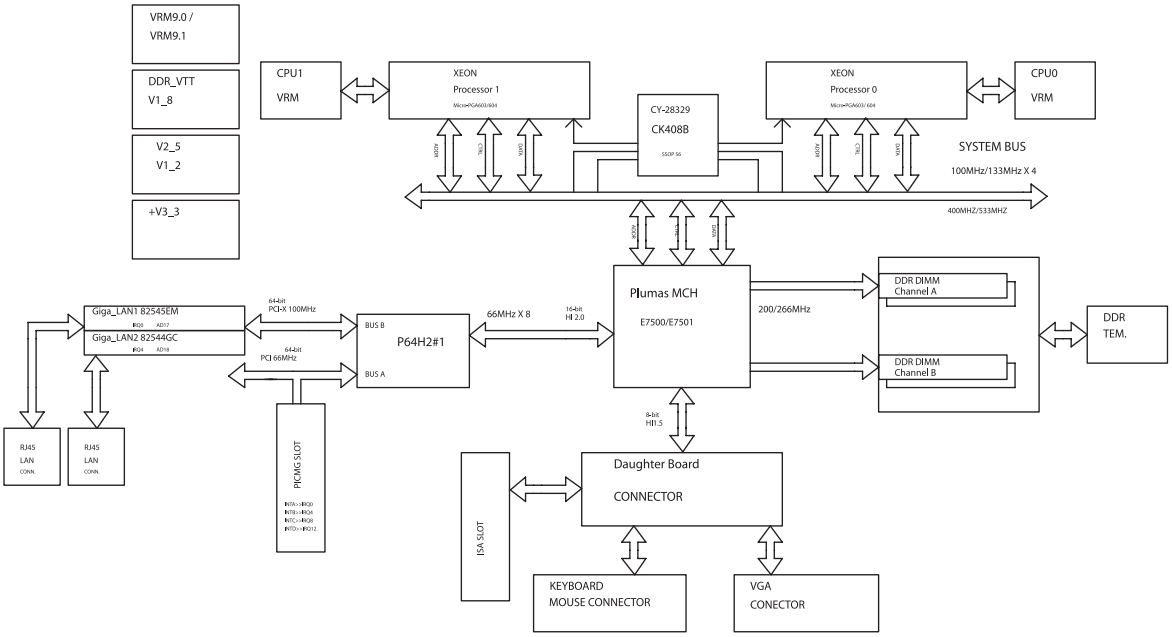
Display

- ATI Rage™ XL with 8 MB frame buffer memory
- 1 x 15-pin CRT connector

I/O Interface

- 4 x on-board USB port
- SMBus 2.0 controller
- FWH interface/LPC interface/ AC' 97 2.0 interface
- USB 1.1 compliant
- Integrated System Management Controller
- ITE 8712F-A super I/O
- SIO: 2 ports with 2x5 pin header
- PIO: 1 x 26-pin connector, Bi-directional, EPP/ECP
- Floppy Disk port: 1 x 34-pin connector
- PS/2 Keyboard/Mouse port: 1 x 6-pin mini DIN connector , 1 x 5-pin connector (for external keyboard)
- 1 x On-board buzzer
- GPIO x 8 (4 in, 4 out)
- 1 x on-board 2-pin header for I2C
- 1 x on-board 2-pin header for reset SW/ 1 x 2-pin for IDE active LED/ 1 x2-pin ATX power SW

Block Diagram



- 1 x 3-pin power header for 3-pin power cable to connect to backplane board to support ATX power on function.
- Extra on-board 4-pin power source input
- AC' 97 output, 1 x 10-pin header
- I/O On Bracket
  1 x VGA DB-15 connector
  2 x RJ45 Gigabit Ethernet LAN port
  1 x Mini-DIN for Keyboard/Mouse
  4 x USB 1.0 ports

Watchdog Timer

- Programmable Watchdog Timer from 1, 2, 4, 8,16, 32,…...256 seconds

On-board RTC

- On-chip RTC with battery backup
- 1 x External battery

Disk On Module

- HDD: 2 x 40-pin connector ; Ultra DMA 33/66/100 support
- IDE active LED: 1 x 2-pin header

ISA Support

- 1 x ITE 8888 PCI to ISA Bridge
- Provides 64 mA high driving capability to maximize ISA signals for support for up to 20 ISA cards on the backplane ISA Slot

System Monitor

- Derived from Super I/O ITE 8712F-A to support system monitor
- 8 voltage (For +1.5 V, +3.3 V, +5 V, -5 V, +12 V, -12 V, Vcore and Vcc 5 V Standby)
- One for CPU fan speed
- Two temperature (one for CPU, another for external system use)

Power Input

- Power source from backplane through PCI/ISA golden finger
- Supports both AT or ATX power supplies
- +3.3 V is converted from +5 V and not directly from backplane or power supply
- +5 Vsb (standby power) available from backplane through 3-pin connector
- 4-pin +12 V power input connector

CPU: 2 x Intel® Xeon® 3.06 GHz Memory: 2 x DDR266 256 MB	+12V	+5V	+5Vsb
Full-Loading Mode	13.39A	9.84A	0.84A
Light-Loading Mode	3.24A	8.28A	0.77A

Dimensions

- 338.58 mm (L) x 122 mm (W) (13.3" x 4.8")

Environment

- Operating temperature: 0°C to 60°C (0°C to 50°C for 2.8 GHz CPU or above)
- Storage temperature: -20°C to 80°C
- Relative humidity: 10% to 90% (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **PEAK 7220VL2G (LF) (P/N: 10P7220VL00X0)** RoHS Compliant
  PICMG Full-Size SBC, Intel® E7501 Chipset, Socket 604 Dual Xeon CPU up to 2.8 GHz+, 400/533 MHz FSB, 64-bit/66 MHz PCI-X, Max. 8 GB ECC register DDR 266 DIMM, ATI Rage XL VGA, Intel® 82545GM GbE x 2, CPU fan and heatsink included

We reserve the right to change specifications and product descriptions at any time without prior notice.