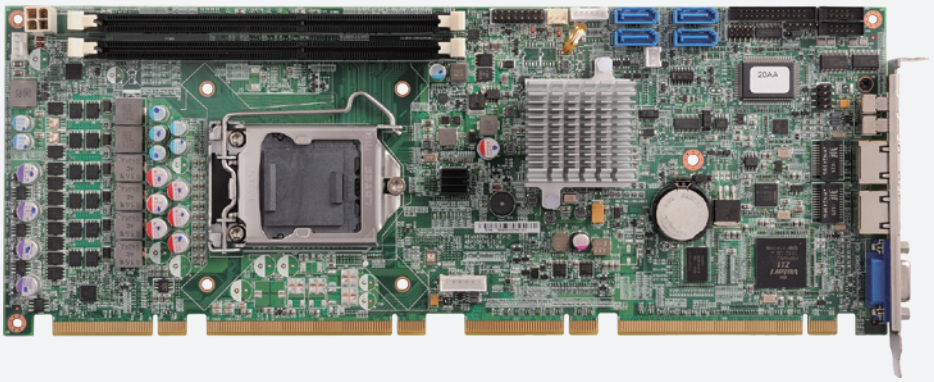
PEAK 877VL2

PICMG 1.3 Intel® Core™ i7/i5/i3/Pentium® LGA1156 with Q57 2 x PCI Express Gigabit LAN/6 x SATA/8 x USB2.0



Main Features

- Onboard XGI Z11 graphic for Intel® Core™ i7 processors
- Support Intel® LGA1156, Core™ i7/i5/i3/Pentium®
- 1 x 82574 PCI Express Gigabit Ethernet
- 1 x 82578DM Gigabit Ethernet
- 6 x SATA, 8 x USB2.0, 2 x COM, 1 x Parallel
- Support Non-ECC Dual Channel DIMM-DDR3 1066/1333 MHz up to 8GB
- Intel® AMT 6.0

Product Overview

PEAK 877VL2 is PICMG 1.3 full-size Single Board Computer (SBC), which supports Intel® Core™ i7/i5/i3/Pentium® processors with Hyper-Threading technology. The Intel® Core™ i7/i5/i3/Pentium® supports dual channel non-ECC DDR3 1066/1333 MHz memory in two DIMM slots and an XGI Z11 integrated graphics controller. The Q57 Express Chipset PCH manages SATA HDD ports, parallel port. Furthermore, it supports other versatile I/O ports such as two serial ports, eight USB ports, and two PCI Express Gigabit LAN ports. The PEAK 877VL2, with Intel® Core™ i7/i5/i3/Pentium® and PCI Express LAN, offers a great solution for advanced industrial application that requires processing performance.

Specifications

CPU Support

- Intel® LGA1156, Core™ i7/i5/i3/Pentium®
- Intel® Quad Core™ i5/i7

Main Memory

- 2 x 240pin DIMM, for up to 8GB dual channel Non-ECC DDR3 1066/1333 SDRAM

Chipset

- Intel® Q57 Express Chipset PCH

BIOS

- AMI BIOS
- Plug and play support
- Advanced power management and advanced configuration & power interface support

On-board LAN

- 1 x Intel® 82578DM PHY for AMT 6.0
- 1 x Intel® 82574L PCI Express Gigabit Ethernet
- Support boot from LAN (PXE)
- 2 x RJ45 with LED

Display

- Integrated graphic engine by XGI Volari Z11 GPU with DDR2 SDRAM through PCIe 1 x Interface
- Analog VGA Interface: 230MHz pixel clock support CRT display up to 1600 x 1200 @ 70Hz 16M colors

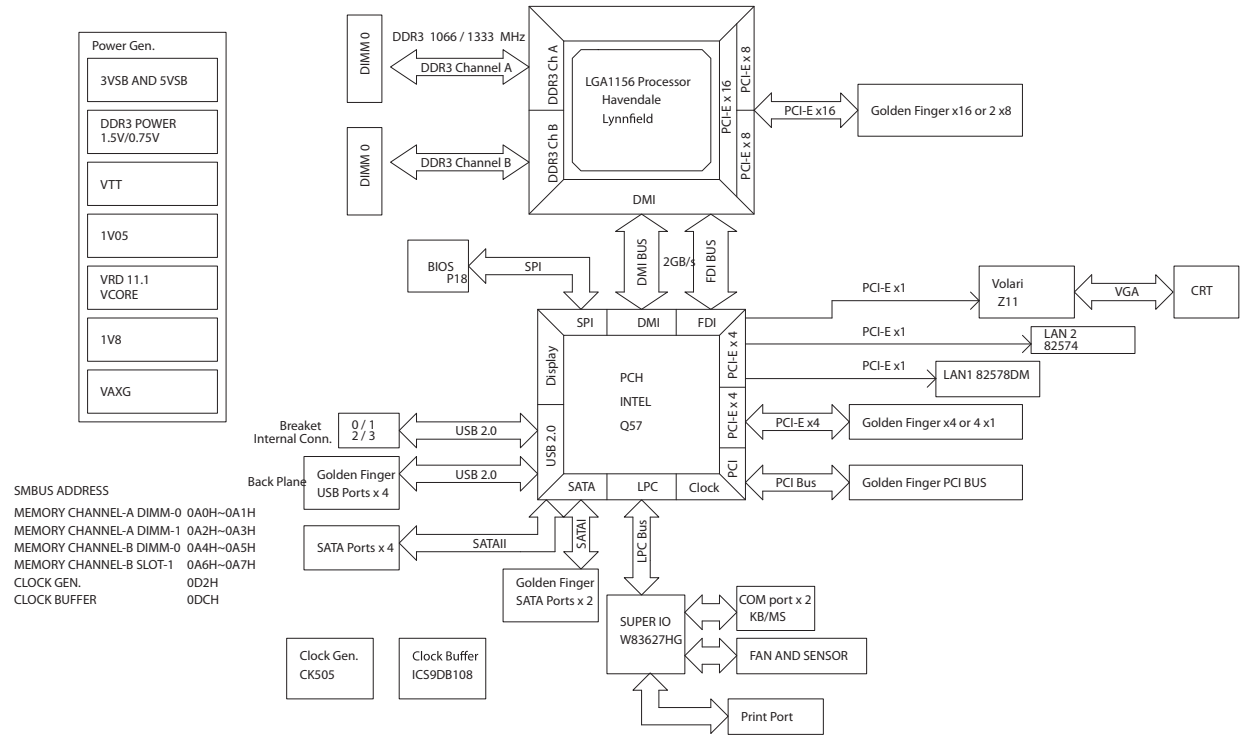
I/O Interfaces

- USB2.0: 8 ports (2 on board, 4 to backplane), 2 ports through I/O Bracket
- Serial port: 2 port, with 2 x 5pin headers (COM 1 and COM 2)
- SATA HDD: 6 ports, Support RAID 0/1/5/10 and Intel® Matrix Storage Technology (Intel® MST)
- Parallel port: 1 x 26pin connector
- IrDA: 1 x 5pin header
- GPIO: Supports 4 sets general purpose I/O each with TTL level (5V) interface
- On-board buzzer x1
- Power LED/Power On/Reset/SMBUS: 2 x 8 pin header
- 1 x 4-pin fan connector (for CPU); 1 x 3-pin fan connectors (for System)
- IPMB interface through PICMG 1.3 Golden-finger
- I/O On SBC Bracket
- 1 x VGA DB-15 connector
- 2 x RJ45 Gigabit Ethernet LAN port
- 2 x USB2.0 Ports

Watchdog Timer

- 1 minute increments from 1 to 255 minutes

Block Diagram



- 1 second increments from 1 to 255 seconds
- On-chip RTC with battery backup
- 1 x External Li-Ion battery

System Monitor

- 6 Voltages (+3.3V, +5V, +12V, Vcore) memory, VTT
- 3 Temperatures (For CPU and System)
- 2 FAN speed monitors (1 for CPU and 2 for System FAN)

Dimensions

- PICMG 1.3 SHB
- Dimension: 338.58mm (L) x 126.39mm (W) (13.3" x 4.9")

Power Input

- Power source from backplane through golden finger and AUX +12V
- Support ATX/AT power supplies
- +12V/+5V/+3.3V/+5Vsb

Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperature: -20°C to 85°C
- Relative humidity: 10% to 90%, (Non-condensing)

Certifications

- CE approval
- FCC Class A

Ordering Information

- **PEAK 877VL2 (P/N:10P0877VL00X0)**
  PICMG 1.3 Full-Size SBC, Intel® LGA1156, Core™ i7/i5/i3/Pentium® with Max 8GB, DDR3 DIMM, VGA integrated, Intel® 82574L PCI Express Gigabit Ethernet x2, Serial ATA x4

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