

## Main Features

- Scalable platform Intel® 3rd generation Core™ i7/i5/i3 processor, Ivy Bridge + Non-ECC
- Intel® Q77 PCH chipset support PICMG 1.3 specification
- Support Dual channel DDR3 with NON-ECC DIMMs 1333/1600MHz up to 16GB
- Support PCIe16, 4 x PCIe1, 4 x USB3.0/4 x USB2.0, 4 x SATA3.0/ 2 x SATA2.0 and GbE
- Display support for VGA, DVI, HDMI, DisplayPort
- Dimension 338.58 x 126,39mm<sup>2</sup> (W x L) (8 Layers Single side)

## Product Overview

The PEAK 886VL2 is a PICMG1.3 Full-size single computing board featuring Intel® Q77 PCH chipset supports Intel® 3rd generation Intel® Core™ processor with Dual DDR3 DIMM socket up to 16GB DDR3 1333/1600MHz SDRAM with Non-ECC support and integrated HD Graphic controller.

The Intel® Q77 PCH manages SATA2.0/3.0 Ports. Furthermore, it supports others versatile I/O ports such as legacy four series ports, KB/Mouse interface, optional TPM function, eight USB ports, four PCI express x1 interface and two Intel® PCI express Gigabit LAN port. It offers a great solution for advance industrial application that requires superb display and processing performance.

### CPU Support

- Support Intel® LGA1155, 3rd generation Intel® Core™ processor  
Intel® Core™ i7- 3770 (4C/8M cache/3.4GHz/Max. TDP 77W)  
Intel® Core™ i5- 3550S (4C/6M cache/3.0GHz/Max. TDP 65W)  
Intel® Core™ i3- 3220 (2C/3M cache/2.4GHz/Max. TDP 55W)  
Intel® Pentium® G2120 (2C/3M cache/1.6GHz/Max. TDP 65W)

### Main Memory

- Dual DDR3/DIMMs, support 1333/1600MHz Non-ECC system memory up to 16GB

### Platform Control Hub

- Intel® Q77 PCH chipset

### BIOS

- AMI System BIOS
- Plug and play support
- Advanced Power Management and Advanced Configuration & Power Interface support

### Display

- Intel® HD graphics with DX11 support up to two independent displays
- One PCI Express x16 Lane down to PICMG1.3 Golden finger
- Supports VGA and DVI/HDMI/Display port interface

### Audio

- HDA interface with PIN Header

### On-board LAN

- Intel® 82579LM Gigabit Ethernet, support iAMT 8.0
- Intel® 82574L Gigabit Ethernet,
- Support PXE boot from LAN, wake on LAN function

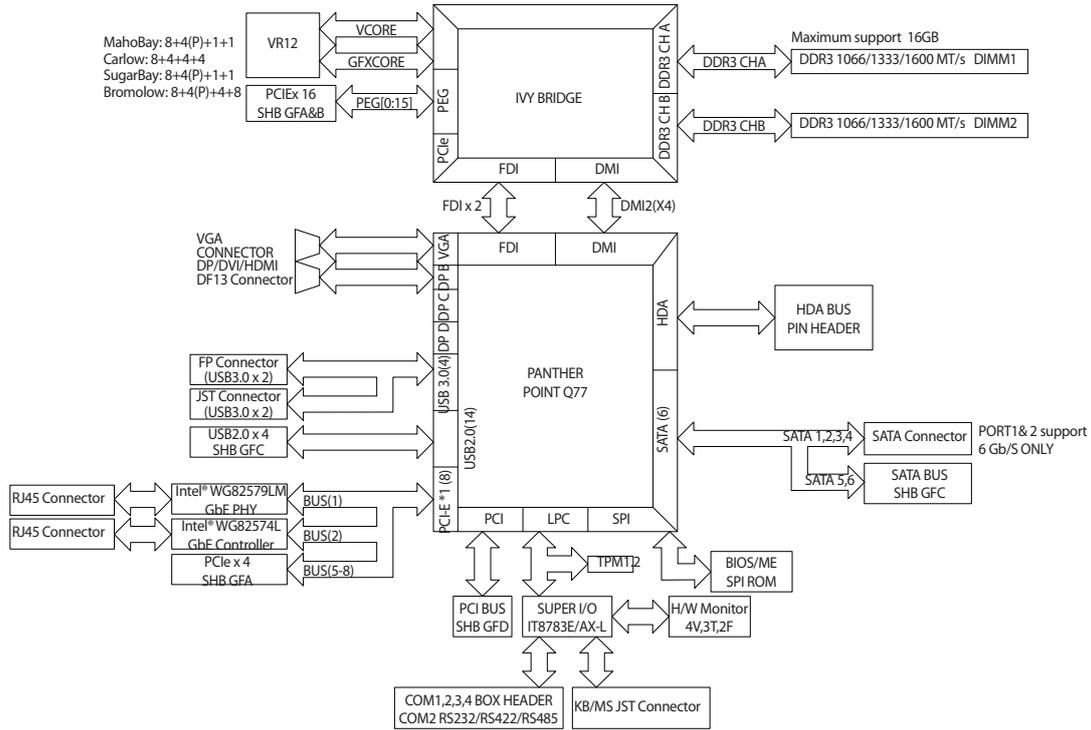
### I/O Interface

- USB: 3.0 2 Ports through I/O bracket/USB2.0: 4 ports through backplane/2 Port through 2.5mm JST connectors
- Six SATA Port: Four SATA 3.0/Two SATA 2.0. (Support RAID0/1/5/10 and Intel® Rapid Storage Technology AHCI)
- One PCI express x16/Four PCI express x1
- Two RJ45 Gigabit Ethernet LAN ports.
- Four series ports (COM2 Supports RS232/422/485, RI pin can supply 5V/12V voltage)
- Parallel port through box header
- Keyboard/Mouse interface
- HDA Interface through pin header for Audio function.
- On board pin header for IRDA
- TPM support(option)

### Power Requirements

- +12V, +5V, +3.3V, +5VSB, +3.3V RTC power
- Power source form backplane through golden finger and AUX +12V
- Support ATX/AT Power supplies

## Block Diagram



### Dimensions

- 338mm (W) x 126mm (L)

### Environment

- Board Level Operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C
- Relative humidity:
  - 10% to 90% (operating, non-condensing)
  - 5% to 95% (non-operating, non-condensing)

### Certifications

- Meet CE
- FCC Class A

## Ordering Information

### ♦ PEAK 886VL2 (P/N: 10P0886VL00X0)

PICMG 1.3 Full-size SBC, Intel® LGA1155 3rd Generation Core™ i7/i5/i3 Processors With Max 16GB, DDR3 DIMM, VGA integration, Intel® Gigabit Ethernet x2, USB3.0 x4, SATA3.0 x4