



## Main Features

- Intel® 3rd generation Core™ i7/ i5/ i3 processor, Ivy Bridge platform
- Intel® Q77 PCH chipset support PICMG 1.3 specification
- Support Dual channel DDR3 with NON-ECC DIMMs 1333/1600MHz up to 16GB
- Support PCIe x16, 4PCIe x1, 4USB3.0/ 4USB2.0, 4SATA3.0/ 2SATA2.0 and GbE
- Display support for VGA, DVI, HDMI, DisplayPort

## 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.

## Specifications

### CPU Support

- Support Intel® LGA1155, 3rd generation Intel® Core™ processor
- Intel® Core™ i7- 3770 / i5- 3550S / i3- 3220 / G2120

### Main Memory

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

### Platform Control Hub

- Intel® Q77 PCH chipset

### Display

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

### On board LAN

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

### Front I/O

- USB3.0 \*2 port
- RJ45\*2 port
- VGA \*1 port

### On board I/O

- USB2.0: 6 port , 4 ports through backplane 2 Port through 2.5mm JST connectors
- Six SATA Port: 4 SATA 3.0/ 2 SATA 2.0. ( Support RAID0/1/5/10)
- 2 RJ45 Gigabit Ethernet LAN ports.
- 4 series ports (COM2 Supports RS232/422/485)
- Parallel port through box header
- PS2 Keyboard/Mouse interface
- HDA Interface through pin header for Audio function.
- On board pin header for IRDA
- TPM support( option )

### Environment

- Board level operating temperatures: 0°C to 60°C
- Storage temperatures: -20°C to 80°C

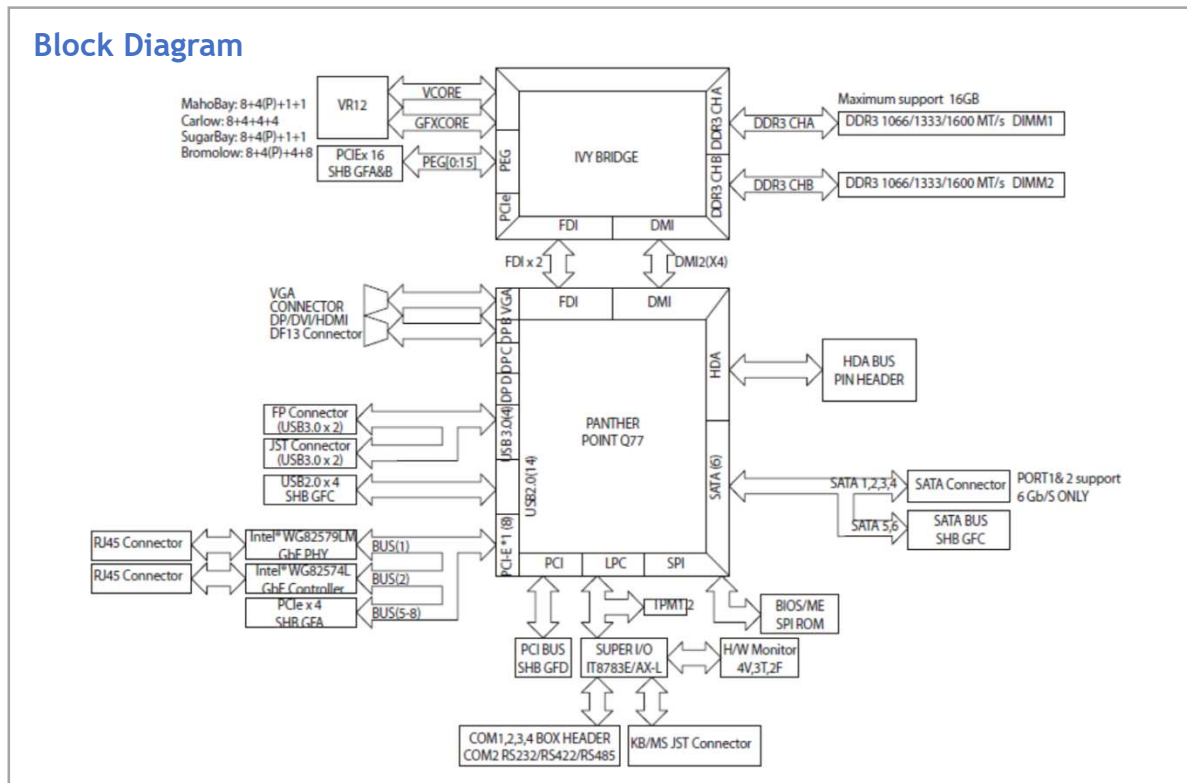
### Relative humidity:

- 10% to 90% (operating, non-condensing)
- 5% to 95% (non-operating, non-condensing)

### Certifications

- Meet CE
- FCC Class A

## Block Diagram



## Ordering Information

### Top Side Dimensions

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

### 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

### Operating System

- Windows® XP,
- Windows® 7,
- Windows® 8.1

### 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

## Backplane Selection Guide

### PICMG1.3 Backplane

Model	BP0926	BP1358	BP1412X1	BP142A0	BP14282	BP14534	BP14570	BP14670	BP19216	BP8648S
<b>Total Slot</b>	10	10	14	14	14	14	14	14	14	14
<b>Expansion slot</b>	PCIex16	1	1	1		1	1	1	1	
	PCIex8				1					
	PCIex4	1		1	1			4	1	8
	PCIex1		3	12		4	4			4
	PCI-X					8				
	PCI	6	8		10	2	3	7	7	16
ISA						4				
<b>PSU Type</b>	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX	24+4 pin ATX