

## Main Features

- Intel® Coffee (8th generation Core™ i7/i5/i3) processor, 65W TDPs, LGA1151 socket
- Support Intel® Q370/H310 PCH chipset PICMG 1.3 specification
- Support 2 x DDR4 Long DIMM 288-pin socket
- Support multiple display from VGA & mini DP & DP
- 4 x SATA III, 2 x GbE LAN, 4 x COM, 1 x LPT, 4 x USB 3.1, 2 x USB 2.0, 1 x HD audio, M.2
- Optional: TPM, CPU cooler, M.2 storage

## Product Overview

The PEAK 889VL2 serial is a PICMG1.3 full-size single-board computing .It equipped with Intel® 8th generation Core™ i7/i5/i3 processors and Intel® Q370/ H310 chipset. It comes with dual DDR4 DIMM socket up to 32GB DDR4 2666MHz with non-ECC support and integrated HD graphic controller. The PEAK 889VL2-Q SKU with Intel® Q370 PCH providing high performance and rich expansion. The SATA 3.0 ports with RAID 0, 1, 5 and 10 helps provide quick access to data files and data protection. Furthermore, the advanced storage capabilities with Intel® RST features PCIe Gen3 x 4 on NGFF M.2 form factor(2280) to maximizes storage performance and it also features an integrated Intel® AMT 12 for easier maintenance. The PEAK 889VL2-H SKU with Intel® H310 PCH provides high performance and cost effective solution.

## Specifications

### CPU Support

- Intel® 8th generation Core™ i7/i5/i3, TDP 65W

### Platform Control Hub

- Intel® Q370 express chipset PCH
- Intel® H310 express chipset PCH

### BIOS

- AMI system BIOS
- 16 Mbit SPI depended on AMT function

### Display

- VGA connector
- Mini DP connector
- DP connector (optional)

### System

- 2 x Dual channel DDR4 2666 support up to 32GB, non-ECC
- 2 x LAN Intel® I219-LM & I211 PCIe GbE LAN controller

### Q370 PCH

- 2 x USB 3.1 Gen1/2, 4 x USB 3.1 Gen1 and 5-port USB 2.0 2-Port through I/O bracket (USB 3.1 GEN1/2+redriver)
- 4-Port through 2.0mm box header 2 x 10 (USB 3.1 Gen1)

- 1-Port Type A (USB 2.0)
- 4-Port through backplane (USB 2.0)
- Storage device 4 x SATA III 6.0Gb/s
- SATA 1, 2 use switch to PICMG 1.3 connector C to B/P (BIOS setting)
- 1 x M.2 2280 M key with 4 x SATA III & PCIe (NVMe Gen3), support Intel® RST

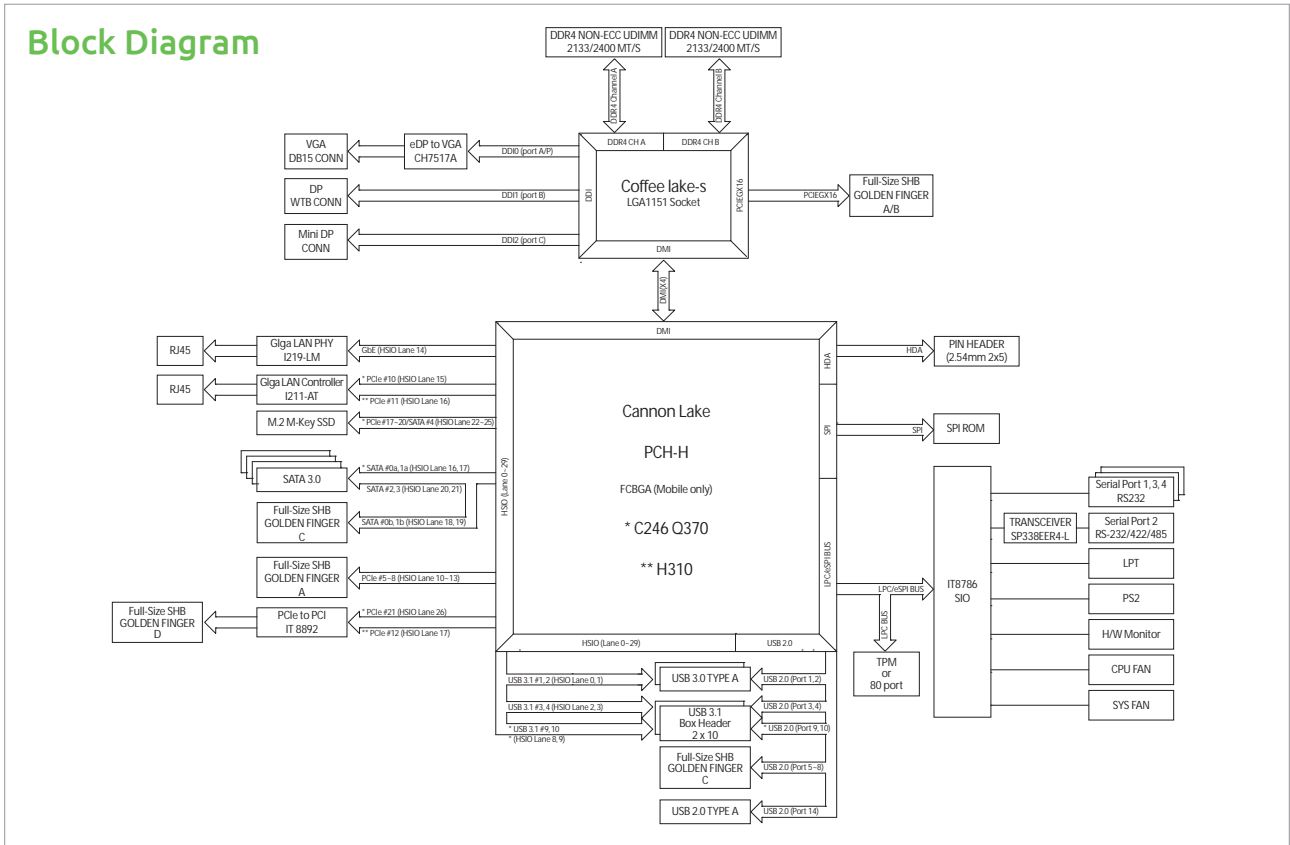
### H310 PCH

- 4 x USB 3.1 Gen1 2-Port through I/O bracket (USB 3.1 Gen1)
- 2-Port through 2.0mm BOX header 2 x 10 (USB 3.1 Gen1)
- Storage device 4 x SATA III 6.0Gb/s
- SATA 0,1 by backplane

### 4 x Serial Ports

- 1 x RS232/485/422 and +5V/RI/+12V select by COM 2
- 3 x RS232 by COM1, 3, 4
- 1 x LPT
- 1 x PS/2 JST connector
- WDT 1 ~ 255 steps by software program
- 1 x HD Audio header (compatible with NEXCOM audio daughter board PN: 10E000HDA00X0 EBK-HAD)
- 1 x Front panel connector
- 1 x ATX 4-pin power connector

## Block Diagram



### I/O Interface

- 1 x PCI express x16 (PEG Gen3)
- 1 x PCI express x4 Gen 3 (Q370); (Gen 2 only for H310)
- 4 x PCI to backplane

### Rear I/O

- 2 x USB 3.1 ports
- 2 x GbE LAN ports
- 1 x VGA connector
- 1 x Mini DP connector

### Power Requirements

- Power source from backplane through golden finger and AUX +12V
- Support ATX/AT function by jumper setting
- BIOS default is (ATX MODE)

### Mechanical & Environment

- Operating temperature: 0°C ~ 60°C
- Storage temperature: -20 ~ 85°C
- Relative humidity: operating 10% ~ 90%, non-condensing

### Dimension

- 338.58 mm x 126.39 mm, 8 layers (single side)

### Operating System

- Windows® 10 64-bit

### Certificate

- EMC & Safety
- CE/FCC Class A

## Ordering Information

- **PEAK 889VL2-Q (P/N: 10P00088901X0)**  
PICMG 1.3 full-size SBC, Q370, Intel® LGA1151, DDR4 DIMM, support triple display, 2 x LAN, 6 x USB 3.0, 4 x SATA 3.0, M.2 (support PCIe storage)
- **PEAK 889VL2-H (P/N: 10P00088900X0)**  
PICMG 1.3 full-size SBC, H310, Intel® LGA1151, DDR4 DIMM, support dual display, 2 x LAN, 4 x USB 3.0, 4 x SATA 3.0