

Main Features

- Intel® Coffee Lake (8th Generation Core™ i7/i5/i3) Processor, 65W TDPs, LGA1151 Socket.
- Support Intel® Q370 / H310 PCH chipset
- Support two DDR4 Long DIMM 288 PIN socket.
- Support multiple display from VGA & Mini DP & DP.
- SATA III x 4, GbE LAN x 2, COM x 4, LPT x1, USB3.1 x 6, USB 2.0 x2, HD Audio, M.2 x1.
- Optional :
 - TPM
 - CPU cooler
 - M.2 storage

Product Overview

The PEAK889VL2 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 16GB DDR4 2666MHz with Non-ECC support and integrated HD Graphic controller. The PEAK889VL2-Q SKU with Intel® Q370 PCH providing high performance and rich expansion. The SATA3.0 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 x4 on NGFF M.2 form factor(2280) to maximizes storage performance and it also features an integrated Intel® AMT 12 for easier maintenance. The PEAK889VL2-H SKU with Intel® H310 PCH provides high performance and cost effective solution.

Specifications

CPU Support

- Intel® 8th Generation Core™ i7/i5/i3, TDP65W.

Platform Control Hub

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

BIOS

- ▣ AMI system BIOS
- ▣ 256MBit SPI depended on AMT function

Display

- VGA connector.
- Mini DP Connector.
- DP connector.

System

- 2 x Dual Channel DDR4 2666 support up to 32GB, non-ECC.
- 2 x LAN Intel I219LM & I211 PCIe GbE LAN controller.

Q370 PCH:

- 2 x USB 3.1 Gen1/2, 4 x USB 3.1 Gen1 and 5 x USB2.0: 2 ports through I/O bracket (USB3.1 GEN1/2) 4 port through 2.0mm box header 2x10 (USB 3.1 Gen1) 1 port Type A (USB 2.0)
- 4 ports through backplane(USB2.0)

Storage device

- 4 x SATA III 6.0Gb/s.
- 1 x M.2 2280 M key with SATA III & PCIe x4 (NVMe Gen 3) , support Intel RST

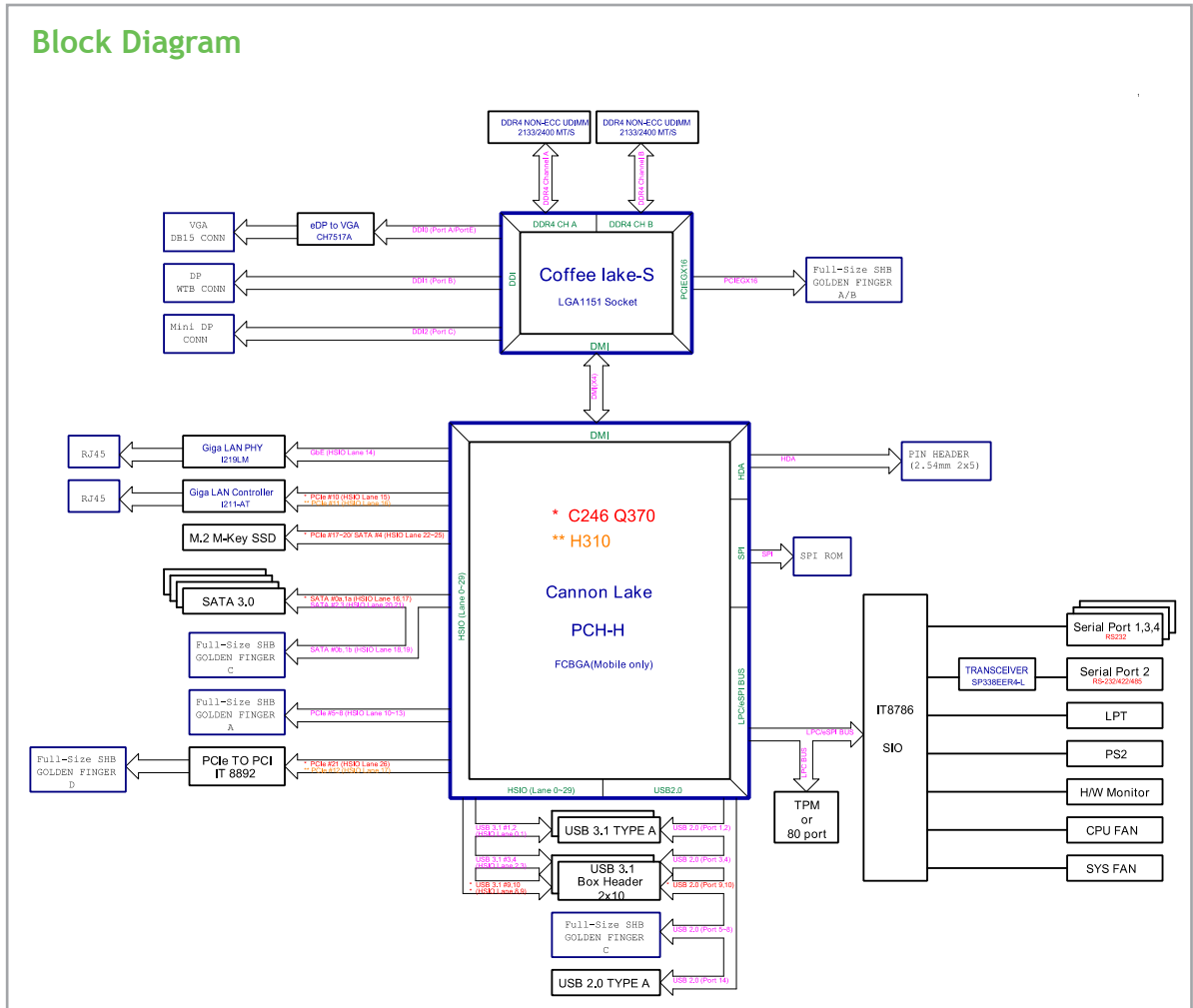
H310 PCH:

- 4 x USB 3.1 Gen1: 2 ports through I/O bracket (USB3.1 Gen1), 2 port through 2.0mm BOX header 2x10 (USB 3.1 Gen1) 1 port Type A (USB 2.0)

Storage device

- 4 x SATA III 6.0Gb/s.
- SATA 0,1 by backplane.

Block Diagram



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.

I/O Interface

- 1 x PCI express x16 (PEG Gen3)
- 1 x PCI Express x1 *4 Gen 3(Q370); (Gen 2 only for H310);
- 4 x PCI to backplane.

Rear I/O

- 2 x USB3.1 Gen1/2 ports. (Gen 1 only for H310)
- 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.

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 64bit

Certificate

- EMC & Safety.
- CE/FCC Class A.

Ordering Information

Art. N° 156441 PEAK8889VL2-Q

PICMG 1.3 Full-size SBC, Q370, Intel® LGA1151, DDR4 DIMM, support triple display, LAN x 2, USB 3.1 Gen1/2 x 2, USB 3.1 Gen1 x 4, USB 2.0 x 1 SATA 3.0 x 4, M.2 (support SATA & PCIe storage), COM x4, LPT x1.

Art. N° 156442 PEAK889VL2-H

PICMG 1.3 Full-size SBC, H310, Intel® LGA1151, DDR4 DIMM, support triple display, LAN x 2, USB 3.1 Gen1 x 4, SATA 3.0 x 2, COM x 4, LPT x 1.

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