



Main Features

- Intel® 8th/9th Generation (Coffee Lake-S, Coffee Lake-S Refresh) Core™ i9/i7/i5/i3, Pentium 14nm LGA 1151 socket Processor, Max Octal core TDP 95W, PCH Q370/H310
- 2x SO-DIMM DDR4 with non-ECC SO-DIMM 2666MHZ up to 64GB
- Support triple display DVI-I(VGA, DVI-D or HDMI) & DP.
- 2x Intel® GbE LAN, 2x USB 3.1 (Gen1), 6 x USB 2.0, 3x RS232, 1x RS232/485/422, 4x SATAIII
- 1x PCIe16, 1x PCIe4, 1x PCIe1, 1x 60pin connector, 1x M.2 (2280 M-Key)
- TPM (optional), WDT, DIO(4In/4Out).



Product Overview

The PEAK980 serial is a PICMG1.3 Half-size Single-Board Computing .It equipped with Intel® 8/9th generation Core™ i9/i7/i5/i3 processors and Intel® Q370/H310 chipset. It comes with Dual DDR4 SO-DIMM socket up to 64GB DDR4 2666MHZ with Non-ECC support and integrated HD Graphic controller. The PEAK980-QSKU 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 PEAK980-H SKU with Intel® H310 PCH provides high performance and cost effective solution.

Specifications

CPU/Chipset

- Intel® 8/9th Generation Core™ i9/i7/i5/i3/Pentium LGA 1151 socket Processor, Max Octal core TDP 95W
- Intel® Q370/H310 (co-design) Express Chipset

Main Memory

- 2 x DDR4 SO-DIMM memory Socket with non-ECC support, up to 64 GB 2666MHZ

BIOS

- AMI (UEFI)

Display

- 1x DVI-I connector
VGA : (resolution up to 1920x1080@60Hz).
DVI-D : (resolution up to 1920x1080@60Hz).
- 1 x DP connector (resolution Up to 4096 x 2160 @ 24 Hz/3840 x 2160 @ 60 Hz)

System

- 2x USB3.1 (Gen1), 2 x USB3.1 (Gen1), 6x USB2.0, 3x RS232, 1x RS232/485/422
- 1 x Front panel header, digital I/O (4In/4Out), WDT.
- Supports TPM 2.0 (optional)
- 2x smart Fan connector

Storage

- 4 x SATA III (6.0Gb/s) ports, (support RAID 0/1/5/10 by Q370 Only)
- 1 x M.2 2280 M-key (PCIe4/SATAIII by Q370 Only)

Expansion Slot

- 1x PCIe16(Gen3)signal form processor
- 1x PCIe4, 1x PCIe1(signal form PCH)
- 1x 60pin connector,(2x PCIe4 + 1x PCIe1 by Q370 Only)
- 1x M.2 2280 M-key (PCIe4 or SATAIII by Q370 Only)

Rear I/O

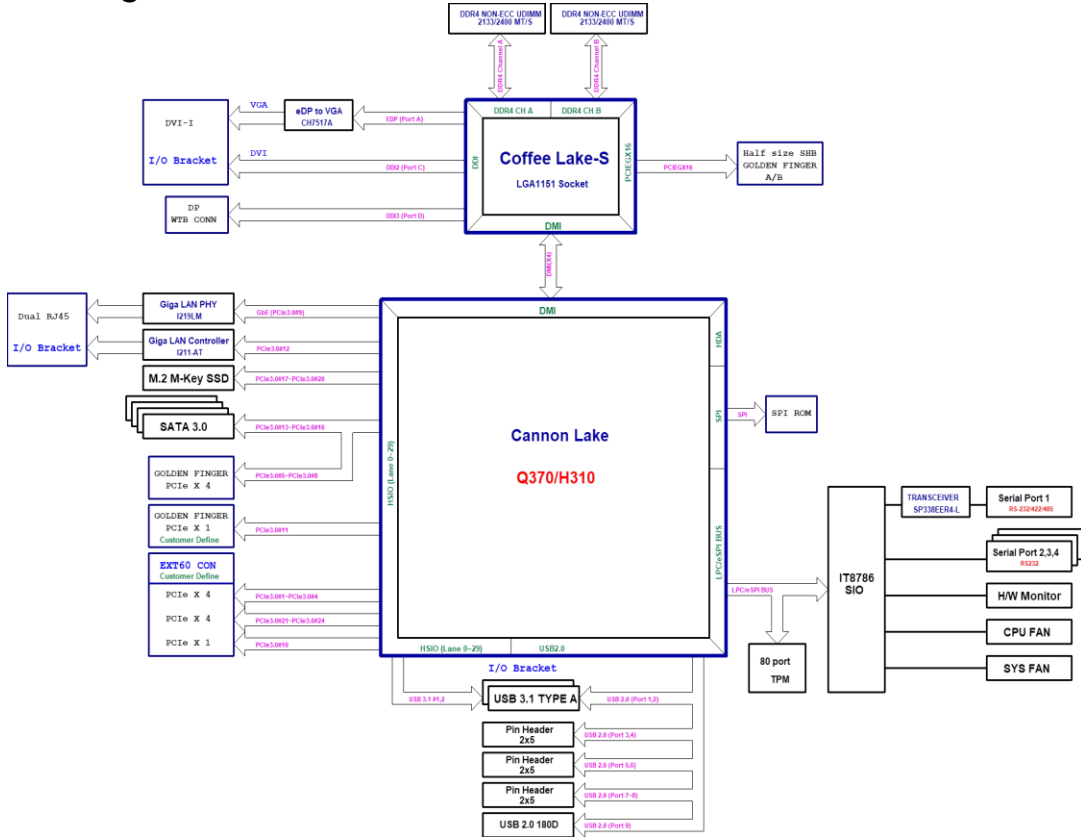
- 2x USB3.1(Gen1)
- 2 x RJ45
 - 1x Intel® PHY i219LM Giga LAN
 - 1x Intel® i211AT Giga LAN .
- 1x DVI-I connector.

Internal I/O

- 6x USB2.0
- 3x serial ports 3x RS232, 1x RS232/485/422 (by COM1)
- 1x Digital I/O interface (4In/4Out)

PEAK980

Black Diagram



Ordering Information

Power Requirement

- Power source from Backplane through Golden Finger and AUX +12V 2x2 connector

Dimensions

- PICMG1.3 Form Factor, 8.9" x 4.9" (228mm x 126mm)

Environment

- Board level operation temperature: -0°C to 60°C
- Storage temperature: -40°C to 85°C
- Relative humidity:
 - 10% to 95% (operating, non-condensing)
 - 5% to 95% (non-operating, non-condensing)

Certifications

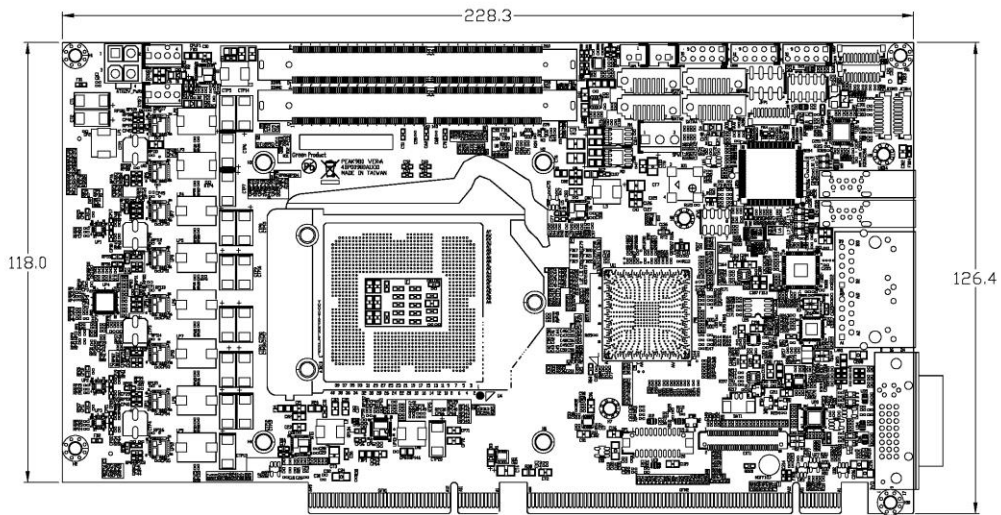
- Meet CE/FCC Class A

Packing

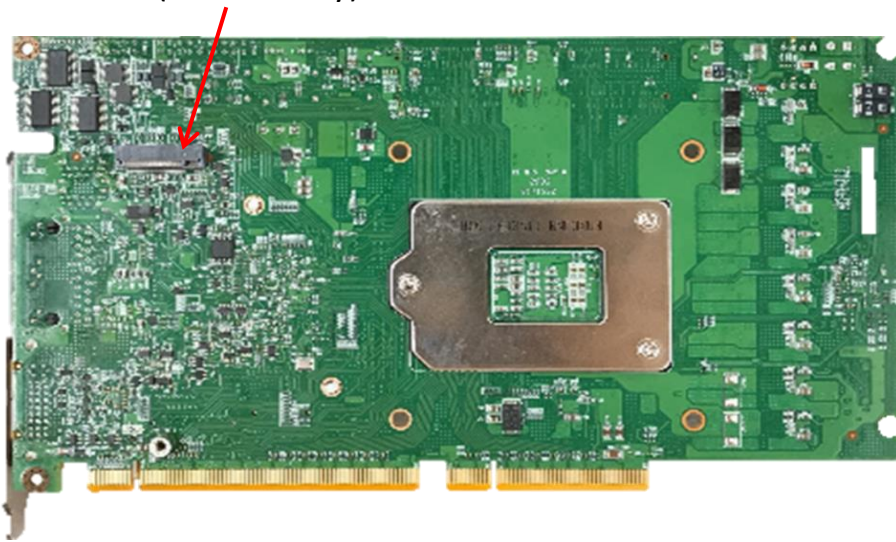
- 7P+15P SATA cable *1
- 2 COM ports + bracket *1
- 2 USB 2.0 ports + bracket *1
- 3 Pin Power cable

Optional Accessories

- DVI-IY cable (P/N:343230280003)
- TPM 2.0 module kit (P/N:8850TPM20001)
- DP cable (P/N:343420000010)



M.2 (2280 M-Key)



Backplane Selection Guide

		NBP1468	NBP1465	NBP1037	NBP1052	NBP06P2	NBP06E5	NBP05P2	NBP1024	NBP1257
PEAK980-Q		Support	Support	Support	Support	Support	Support	Support	*	*
PEAK980-H		*	*	*	*	*	*	*	Support	Support
PEAK980-C		Support	Support	Support	Support	Support	Support	Support	*	*
slot	PClex 16	1	1	1	2	1	1	2	1	1
	PCle x 8		1	1	1			1		
	PCle x 4	5	3	3	3	2	2	1	1	4
	PCle x 1	1	1	2			1			
	PCI	4	5		2	2		2	4	7