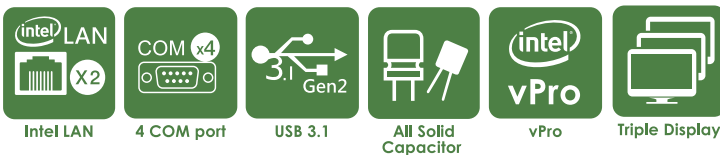
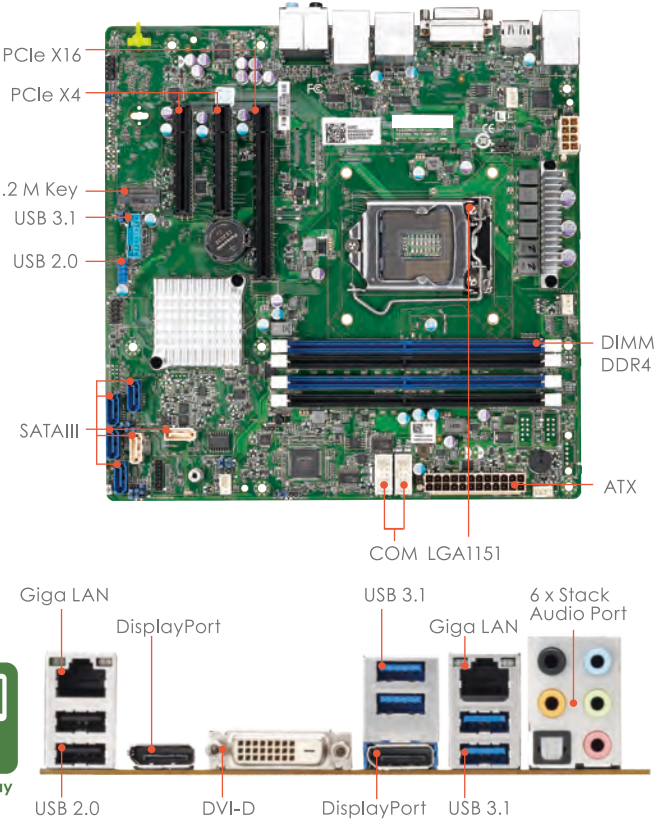


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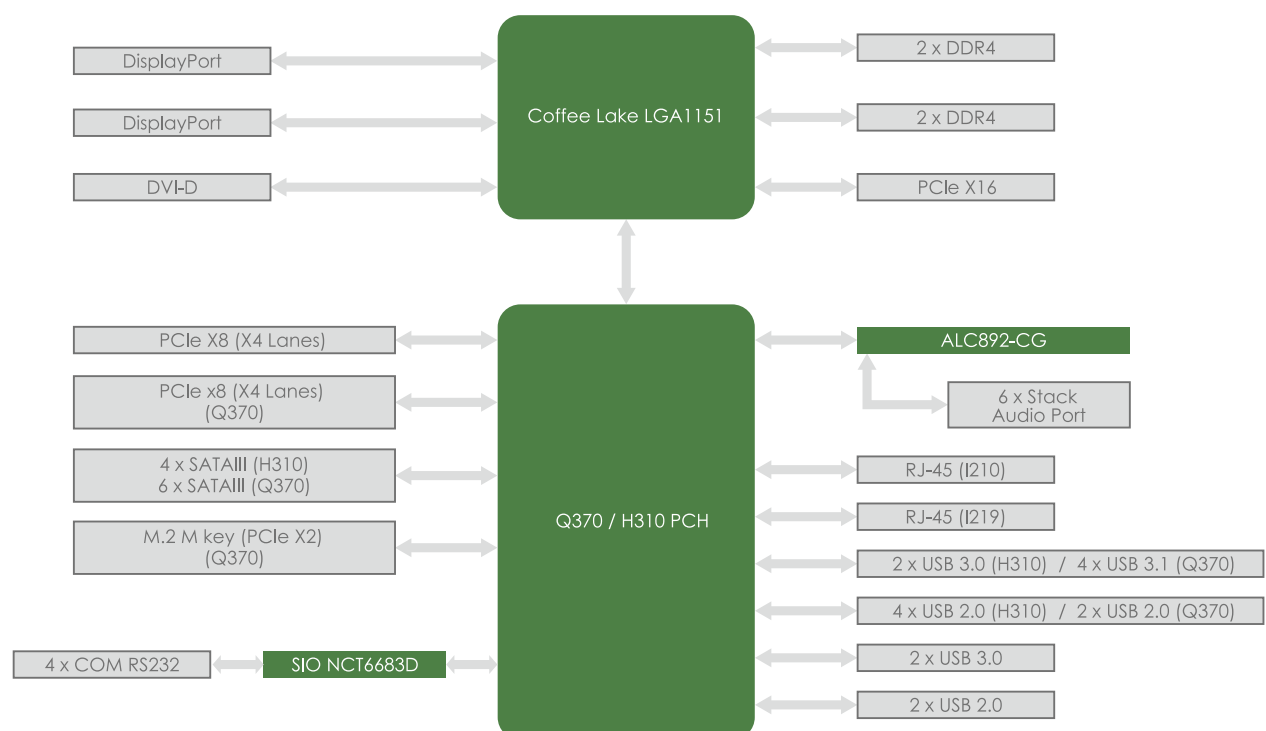
Micro-ATX Form Factor
Intel® Coffee Lake Processor with Q370 / H310 Chipset

Features

- Intel® Coffee Lake Core i7/i5/i3/Pentium/Celeron LGA1151 processors
- Intel® Q370 / H310 Chipset
- Intel® vPro technology supported
- 4 x DDR4 DIMM, support up to 64GB
- Support triple display for 2 x DisplayPort and DVI
- Support PCIe X16 (Gen 3) slot, 2 x PCIe X4 (Gen 3) slot, and M.2 slot
- 6 x SATAIII (support RAID 0, 1, 5, 10 w/ Q370)
- 2 x Intel® Gigabit Ethernet
- 4 x USB 2.0, 2 x USB 3.0, 4 x USB3.1 (Gen 2), 4 x COM
- ATX power input



Block Diagram



PH10FEU Micro ATX

MECHANICAL	
Form Factor	Micro-ATX 9.6" x 9.6" (244mm x 244mm)
SYSTEM	
Processor	9th & 8th Gen Intel® Coffee Lake LGA1151 Socket Processor, Core i7/i5/i3 6-core TDP Max. 95W, Core i9 8-core TDP Max 35W
Chipset	Intel® Q370 (Support RAID 0 / 1 / 5 / 10) / Intel® H310
Memory	DDR4 2666MHz, 4 x 288-pin U-DIMM, Max. 64GB (Non-ECC)
Graphics	Intel® HD Graphics
Ethernet	Intel® I219-LM Giga LAN + Intel® I210-AT Giga LAN
Audio	Realtek® ALC892
I/O Chipset	Nuvoton NCT6683D
TPM	Nuvoton NPCT750AAAYX TPM2.0 (Optional)
Expansion Slot	1 x PCIe 3.0 X16 slot 2 x PCIe 2.0 X8 slot (X4 Lanes) for Q370 1 x PCIe 2.0 X8 slot (X4 Lanes) for H310 / M.2 2242 / 2280 M key (PCIe)
BIOS	256 Mbit SPI, AMI BIOS
H / W Monitor	Temperature Monitor, Voltage Monitor, Fan Monitor
Watchdog Timer	1~255 Steps by Software Program
Smart Fan Control	CPU Fan / System Fan
GRAPHICS	
VGA	—
DVI	Up to 4K (4096 x 2160) @30 Hz
HDMI	—
DisplayPort	Up to 4K (4096 x 2304) @60 Hz
LVDS	—
eDP (Option)	—
REAR I/O	
USB	4 x USB 3.1 Gen 2 (Q370), 2 x USB 2.0 (Q370), 4 x USB 2.0 (H310), 2 x USB 3.0 (H310)
Display I/O	1 x DVI-D, 2 x DisplayPort 1.2
Audio I/O	6 x Stack Audio Jack
LAN I/O	2 x RJ-45
Serial Port	—
PS/2 Port	—
Others	—
INTERNAL CONNECTORS	
Storage	6 x SATAIII / 4 x SATAIII (H310)
USB	2 x USB 3.0 (Q370) 2 x USB 2.0
Display I/O	—
Audio I/O	—
Serial Port	4 x RS232
PS/2 Port	—
Parallel Port	—
GPIO	—
Fan	1 x 4-pin CPU Fan Connector, 1x 4-pin System Fan Connector
Power	1 x ATX 24-pin, 1 x ATX 4-pin, 1 x AT/ATX Mode Select Jumper
Others	1 x Front Audio Header (Mic-in & Line-out), 1 x Chassis Intrusion, 1 x CMOS Jumper
POWER REQUIREMENT	
Power Input	ATX Power 8-pin + ATX Power 24-pin
ENVIRONMENTAL	
Operating Temperature	0 ~ 60°C (32 ~ 140°F)
Storage Temperature	-20 ~ 70°C (-4 ~ 158°F)
Operating Humidity	10% ~ 95% R/H, non-condensing
Certification	CE & FCC Class B
OS	
OS Support	Windows® 10 64-bit Linux (support by request)

Ordering Information

Model Number	Chipset	Display Port	DVI-D	External USB 3.1/3.0/2.0	Internal USB 3.0/2.0	6-stack Audio Jack	RS232	LAN	(2280 M.2 key) / SATA	PCIe X16	PCIe X4	Power
PH10FEU-Q370	Intel® Q370	2	1	4 / 0 / 2	2 / 2	1	4	2	1 / 6	1	2	ATX Power (24-pin + 8-pin)
PH10FEU-H310	Intel® H310	2	1	0 / 2 / 4	2 / 2	1	4	2	0 / 4	1	1	ATX Power (24-pin + 8-pin)

Packing List

Packing		
• 1 x Motherboard	• 1 x 50cm SATA Cable	• 1 x I/O Bracket