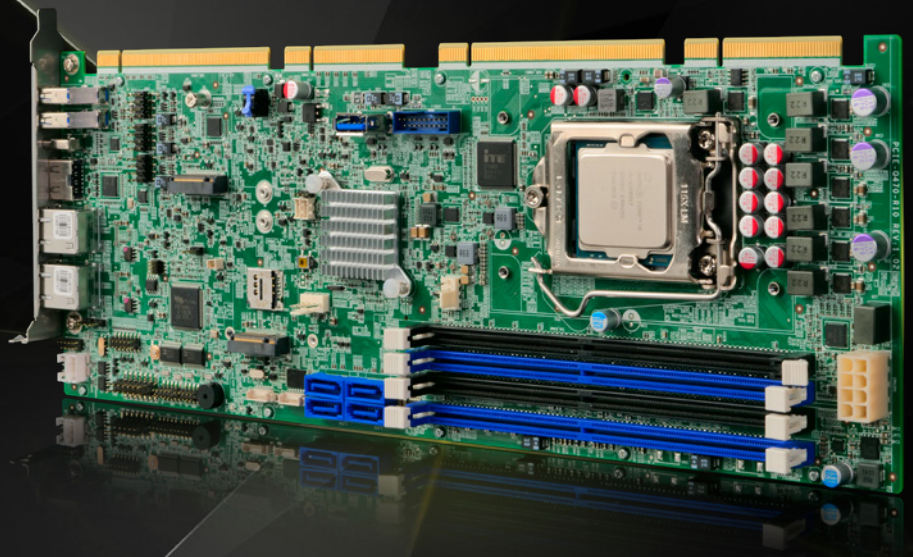


PCIE-Q470

Full-size PICMG 1.3 CPU Card support Intel® 10th/11th Gen. Core™ i9/i7/i5/i3, Celeron®, Pentium® processor

- Support Intel® Q470/Q470E chipset
- Support Dual Intel® 2.5GbE
- Support 16-lanes PCIe signal from CPU via golden finger, 4-lanes PCIe signal from PCH via golden finger, 4-lanes PCI signal from PCH via golden finger, M.2 A key, M.2 B key, M.2 M key expansion
- Support 1 x USB 3.2 Gen2 (10Gb/s) 5 x USB 3.2 Gen1 (5Gb/s), 6 x USB 2.0
- Support 2 x RS-232, 2 x RS-422/485, 4 x SATA interface

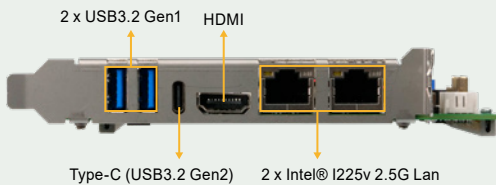
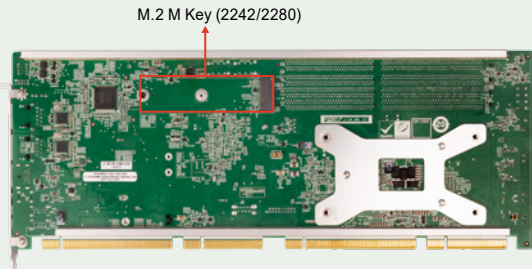
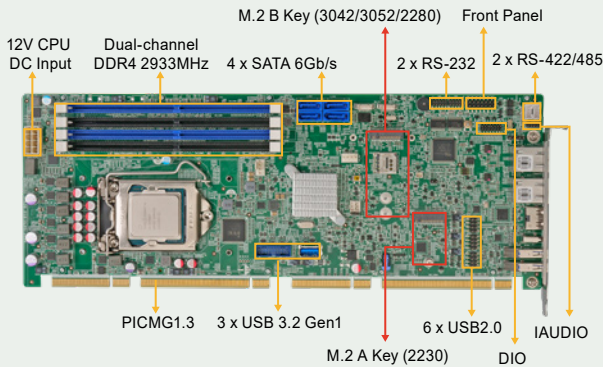
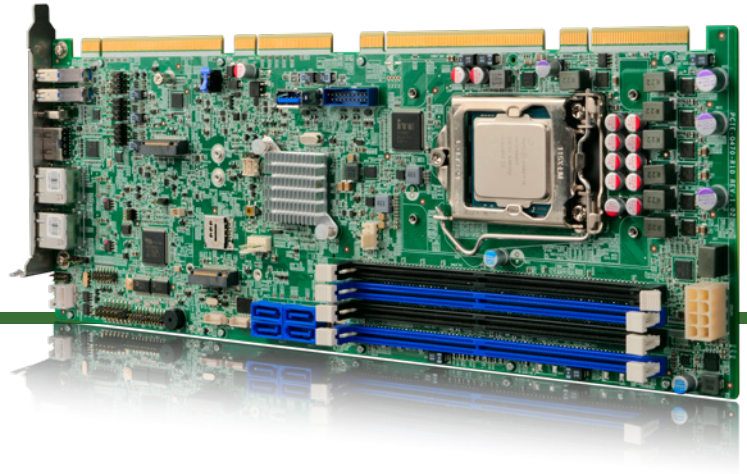
High Performance Capability
with multi-tasking function



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PCIE-Q470

Full-size PICMG 1.3 CPU Card supports LGA1200 Intel® 10th/11th Gen. Core™ i9/i7/i5/i3, Pentium®, Celeron® Processor with Q470, DDR4, HDMI, Dual Intel® 2.5GbE, USB 3.2, SATA6Gb/s, M.2, IAUDIO and RoHS



Support Intel® 10th/11th generation processor

Support Intel® 10th/11th generation Core™ i9/i7/i5/i3, Celeron® Pentium® Serise processor (LGA 1200 slot), release super performance, and can handle multiple tasks at the same time



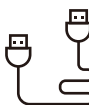
Support Intel® I225V 2.5GbE Ethernet Controller

Support dual RJ45 network interfaces, based on Intel® I225V 2.5GbE network controller core Chip to achieve network transmission rate up to 2.5GbE



Support Multiple Interface

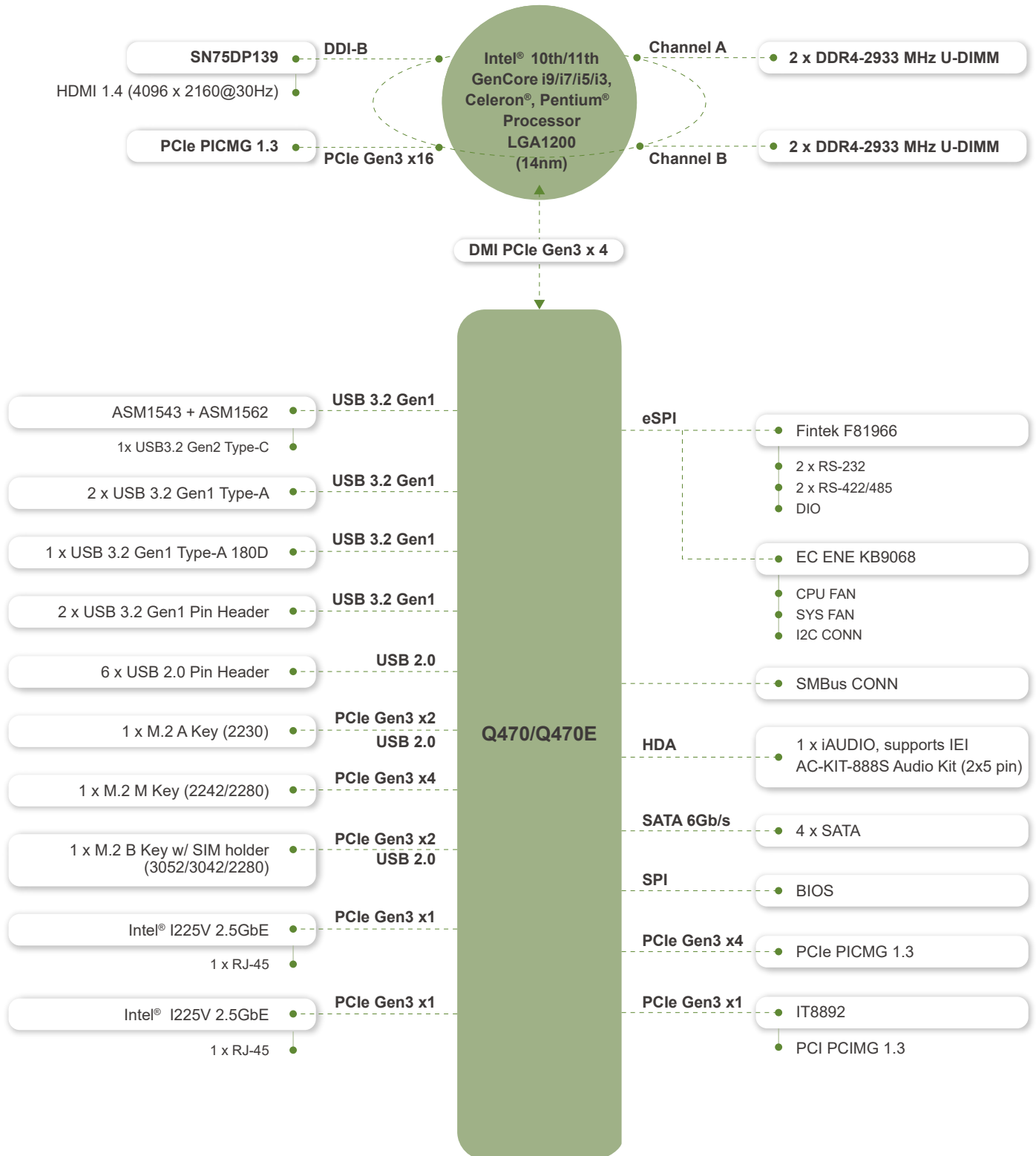
Support 1 x PCIe x16 signal via golden finger (Support x16, or x8 + x8, or x4 + x4 + x8), 4 x PCIe x1 signal from PCH via golden finger (support 1 x4, or 4 x1), 4 x PCI signal via golden finger, M.2 A key for Bluetooth, WiFi module expansion, M.2 B key can be used for 5G module expansion and M.2 M key for NVME storage expansion



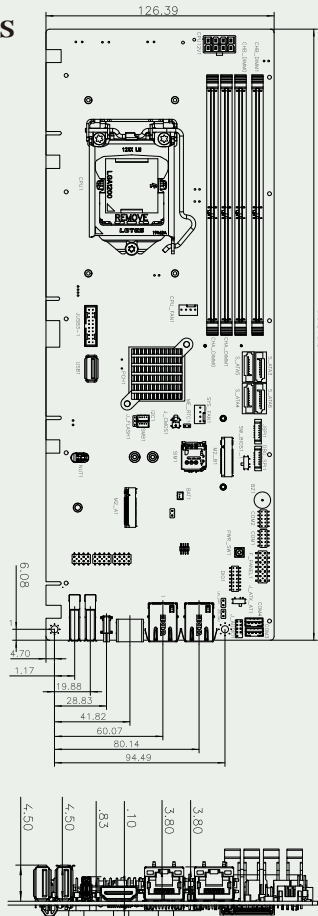
USB 3.2 Gen1/USB 2.0 interface, transmission rate up to 10Gb/s

The motherboard design is based on the USB 3.2 protocol, the I/O layout is 1 x Type-C (10Gb/s), 2 x USB 3.2 Gen1(5Gb/s), and there are USB 3.2 Gen1 and USB 2.0 ports for wiring expansion

PCIE-Q470 Block Diagram



Dimensions



Optional accessories

	
CB-USB02-RS	32102-000100-200-RS
	
32205-002700-200-RS	CF-1150SA-R10
	
CF-1150SB-R11	CF-1150SC-R20
	
CF-1150SE-R11	

Specifications

Model	PCIE-Q470
CPU	LGA1200 Intel® 10th/11th Gen. Core™ i9/i7/i5/i3, Pentium®, Celeron® Processor (Support up to 65w)
Chipset	Intel® Q470/Q470E
BIOS	AMI UEFI BIOS
Memory	4 x 288-pin 2933 MHz Dual-channel DDR4 DIMMs support up to 128G
Graphics Engine	10th Generation CML-S up to Intel® UHD Graphics 630, Intel® HD 9th Generation Display Engine based on 16 low power execution units supporting DX2015, OpenGL 5.X and OpenCL2.x, ES 2.0 11th Generation RKL-S Xe 12th Generation Graphics Architecture, Intel® UHD Graphics 750, supports 12-bit end-to-end, support AV1, VP9, HEVC 12b, HDR10, FP16
Display Output	1 x HDMI 1.4 (up to 4096 x 2160@30Hz)
Ethernet	LAN1: Intel® I225V 2.5GbE controller LAN2: Intel® I225V 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen1 (5Gb/s) 1 x USB 3.2 Gen2 (10Gb/s) by USB Type-C
Internal I/O Interface	4 x SATA 6Gb/s (Support RAID 0/1/5/10) 6 x USB 2.0 (2x4 pin, P=2,54) 2 x USB 3.2 Gen1 (5Gb/s) (2x10 pin) 1 x USB 3.2 Gen1 (Type A 180°) 2 x RS-232 (2x5 pin, P=2.0) 2 x RS-422/485 (1x4 pin, P=2.0) (RS-485 support AFC)
SMBus/ I²C	1 x SMBus (1x4 pin)
I²C	1 x I²C (1x4 pin)
Audio	1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2 x 5 pin)
Front Panel	1 x Front panel connector (2x7 pin) Power LED&HDD LED, Power Button Reset Button
LAN LED	2 x LAN LED (1x2 pin)
Expansion	1 x PCIe x16 signal via golden finger (Support x16, or x8 + x8, or x4 + x4 + x8) 4 x PCIe x1 signal from PCH via golden finger (support1 x4, or 4 x1) 4 x PCI signal via golden finger 1 x M.2 A Key (2230) (with PCIe Gen3 x2/USB 2.0) 1 x M.2 B Key (3042/3052/2242/2280) w/ SIM holder (with PCIe Gen3 x2/USB 2.0) 1 x M.2 M Key (2280/2242) (with PCIe x4)
Digital I/O	1 x 12bit digital I/O (2x7 pin)
TPM	Intel® PTT (TPM 2.0)
Fan Connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 pin)
Chassis Open	1 x Chassis intrusion (1x2 pin)
Power Supply	ATX/AT power supply Support AT/ATX mode ErP/EuP Compliant
Watchdog Timer	Software programmable, support 1~255 sec. system reset
Power Consumption	3.3V@1.04A, 5V@8.61A, 12V@12.33A (Intel® Core™ i9-11900K CPU with 4 GB 3200 MHz DDR4 memory)
Operating Temperature	0°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~ 95%, non-condensing
Dimension	338 mm x 126 mm
Weight	GW:1000g / NW:500g
Certification	CE/FCC compliant

Packing List

1 x PCIE-Q470 single board computer	1 x Mini jumper pack
1 x SATA cable	1 x QIG

Ordering Information

PCIE-Q470-R10	Full-size PICMG 1.3 CPU Card supports LGA1200 Intel® 10th/11th Gen. Core™ i9/i7/i5/i3, Pentium®, Celeron® Processor with Q470, DDR4, HDMI, Dual Intel® 2.5GbE, USB 3.2, SATA 6Gb/s, M.2, iAUDIO and RoHS
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Optional Accessories

CB-USB02-RS	Dual port USB cable with bracket, 300mm, P=2.54
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
32205-002700-200-RS	RS-232/422/485 cable, 200mm, P=2.0
CF-1150SA-R10	Special cooler kit for LGA1150/1151/1200, high-performance compatible, 95W
CF-1150SB-R11	Special cooler kit for LGA1150/1151/1200, high-performance compatible, 65W
CF-1150SC-R20	Special cooler kit for LGA1150/1151/1200, 1U chassis compatible, 65W
CF-1150SE-R11	Special cooler kit for LGA1150/1151/1200, high-performance compatible, 95W