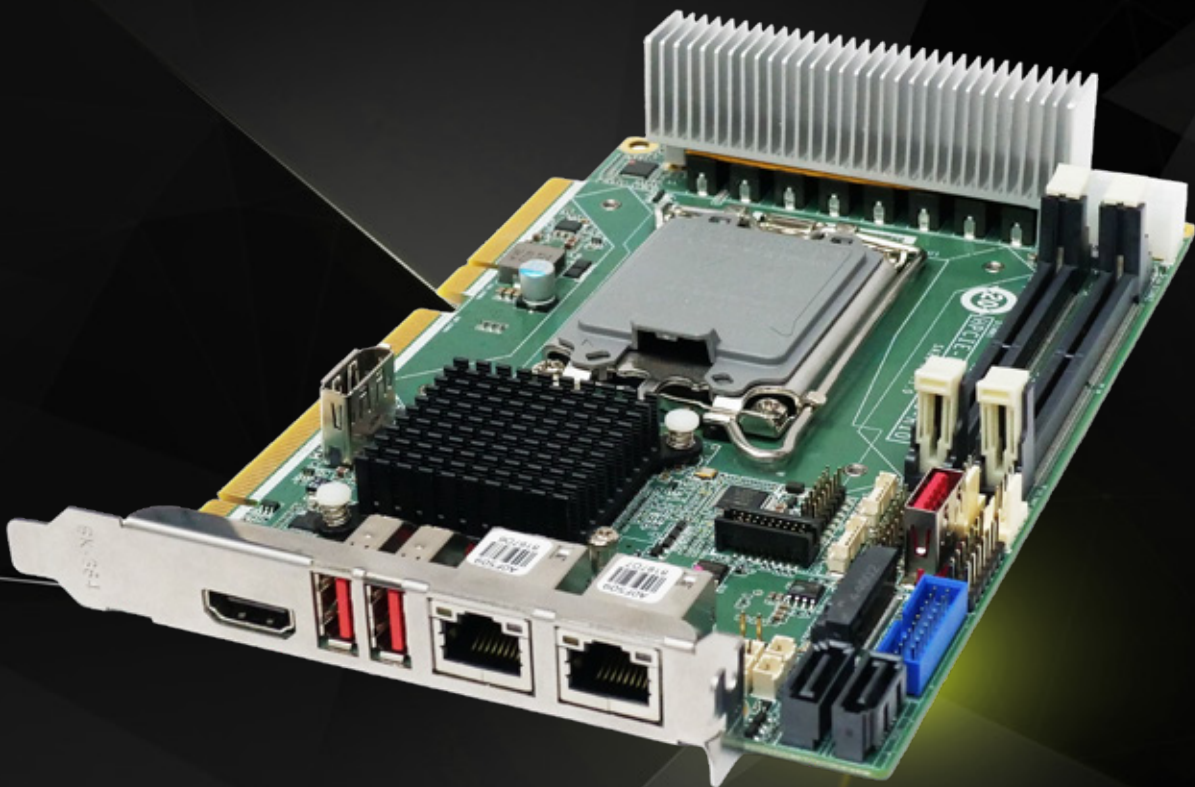


HPCIE-RPL-Q670

Half-size PICMG 1.3 CPU Card supports LGA1700 Intel® 12th/13th/14th Gen. Core™ i9/i7/i5/i3/Pentium®/Celeron® CPU

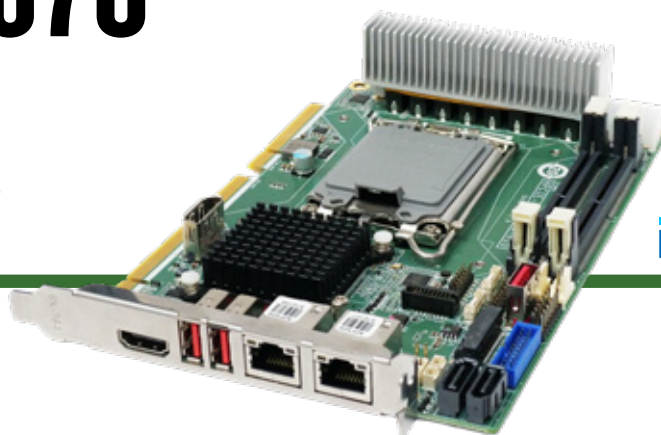
- LGA1700 Intel® 12th/13th/14th Generation Core i9/i7/i5/i3, Pentium and Celeron processor (65W)
- Dual-channel DDR5 5200MHz
- Support dual DisplayPort 1.4 and HDMI 1.4
- Support M key for storage
- Flexible expansion with half-size PICMG1.3 CPU board



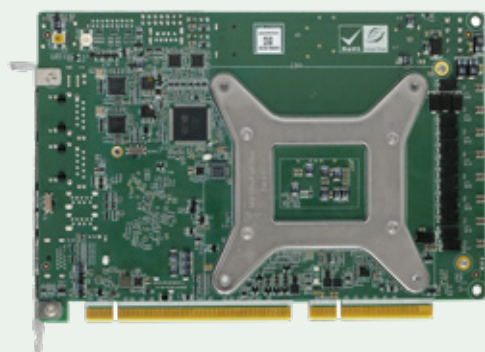
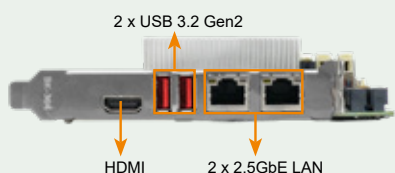
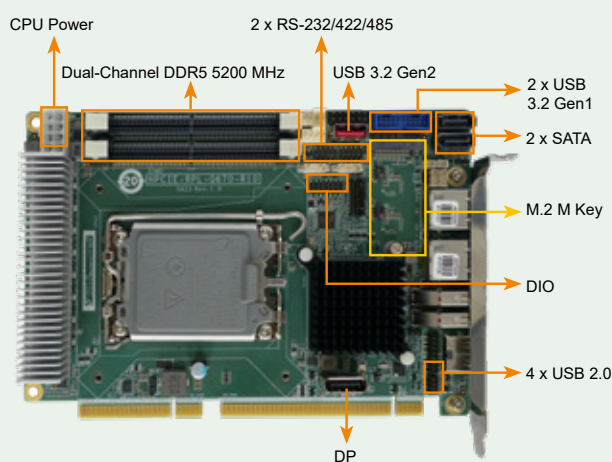
www.ieiworld.com

HPCIE-RPL-Q670

Half-size PICMG 1.3 CPU Card supports LGA1700
Intel® 12th/13th/14th Gen. Core™ i9/i7/i5/i3/
Pentium®/Celeron® CPU with Q670E, DDR5,
HDMI, DP, Dual Intel® 2.5GbE, USB 3.2, SATA 6Gb/s,
M.2, iAUDIO and RoHS



intel



Support Intel® I226V/I226LM 2.5GbE Ethernet Controller

Support dual RJ45 network interfaces, based on Intel® I226V/I226LM 2.5GbE network controller core Chip to achieve network transmission rate up to 2.5GbE



Support multiple interface

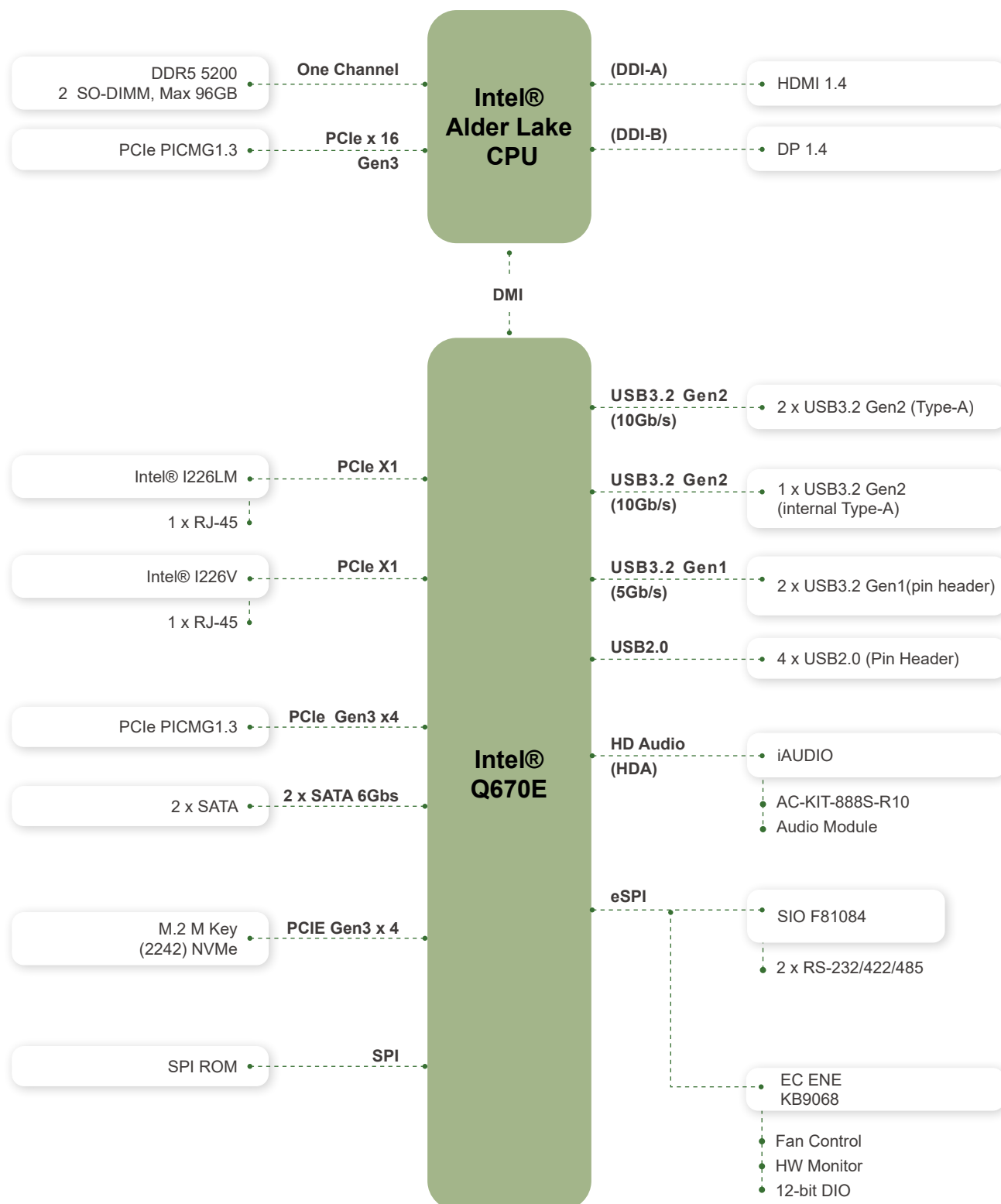
The I/O layout is 2 x USB 3.2 Gen2 (10Gb/s), providing faster transmission rates. The motherboard has 4 x USB2.0 ports, 1 x USB 3.2 Gen2 (Type A, 10Gb/s) and 2 x USB 3.2 Gen1 (5Gb/s) for wiring expansion. It also provides M.2 M key for NVME storage expansion



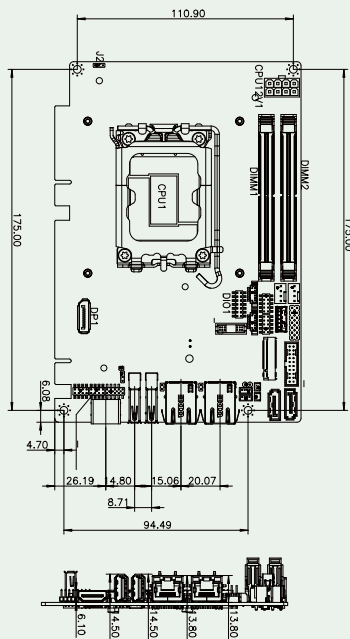
Support multiple baseboard options

Support 16-lanes PCIe signal from CPU via golden finger, 4-lanes PCIe signal from PCH via golden finger, and the backplane can be selected according to requirements

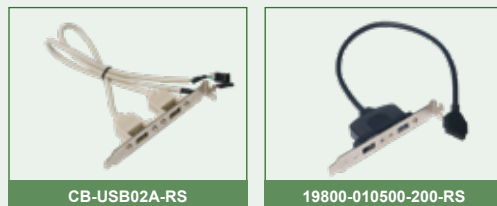
Block Diagram



Dimensions



Optional Accessories



CB-USB02A-RS

19800-010500-200-RS



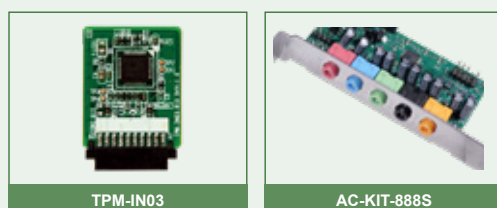
32102-000100-200-RS

19100-000323-00-RS



19100-000319-00-RS

19800-000200-100-RS



TPM-IN03

AC-KIT-888S

Specifications

Model	HPCIE-RPL-Q670
CPU	LGA1700 socket supports 12th/13th/14th generation Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 65W)
Chipset	Intel® Q670E
BIOS	AMI UEFI BIOS
Memory	2 x 262-pin 5200 MHz Dual-Channel DDR5 So-DIMMs supported up to 96GB
Graphics Engine	New Intel® Xe Graphics architecture with SRIOV, Genlock
Display Output	1 x interface DP1.4 (4K @60Hz)180° (DP++) 1 x HDMI1.4 (4K @30Hz)
Ethernet	LAN1: Intel® I226-LM 2.5GbE controller LAN2: Intel® I226-V 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen2 (Type-A) (10Gb/s)
Internal I/O Interface	2 x SATA 6Gb/s (RAID 0/1 supported) 2 x RS-232/422/485 (2x5 pin, P=2.00) (RS485 support AFC) 4 x USB 2.0 (2x4 pin, P=2.00) 1 x USB 3.2 Gen2 (Type A 180°) 2 x USB 3.2 Gen1 (2 X 10PIN P=2.00 pin wafer) (5Gb/s)
SMBus	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 (2 x 7 pin, Power LED, HDD LED, Speaker, Power Button, Reset Button)
LAN LED	2 x LAN LED (1x2 pin)
Expansion	1 x M.2 M Key (2242, PCIe Gen3 x4) NVMe support 16-lanes PCIe signal from CPU via golden finger (supports x16, or x8 + x8) 4-lanes PCIe signal from PCH via golden finger (supports x4, or x1 + x1 + x1 + x1)
Digital I/O	1 x 12-bit digital I/O (2x7 pin)
TPM	Support TPM 2.0(TPM-IN03 module)&Intel PTT
FAN connector	1 x CPU fan connector (1x4 pin) 1 x System fan connector (1x4 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@0.05A, 5V@0.93A, 12V@11.33A, 5VSB@0.37A (Intel i9-14900 2GHz CPU with Apacer DDR5 5600MT/s SODIMM 32GB memory, EuP mode enabled)
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Operating Humidity	5% ~95%, non-condensing
Diemension	168 mm x 126 mm
Weight	GW:1000g / NW:420g

Packing List

1 x HPCIE-RPL-Q670 single board computer	1 x SATA cable (PN: 32801-012500-100-RS)
1 x mini jumper pack (33101-000656-RS)	1 x QIG

Ordering Informaiton

HPCIE-RPL-Q670-R10	Half-size PICMG 1.3 CPU Card supports LGA1700 Intel® 12th/13th/14th Gen. Core™ i9/i7/i5/i3/Pentium®/Celeron® CPU with Q670E, DDR5, HDMI,DP,Dual Intel® 2.5GbE, USB 3.2, SATA 6Gb/s, M.2, iAUDIO and RoHS
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Optional Accessories

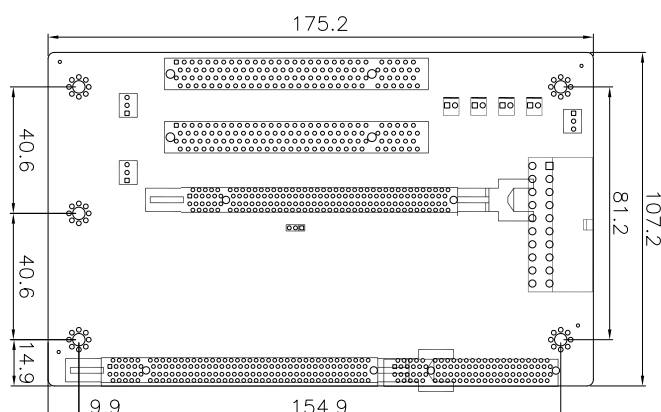
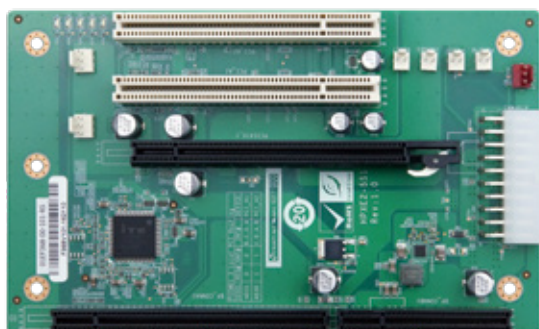
CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.0
19800-010500-200-RS	USB 3.0 cable with bracket, 450mm, P=2.0
32102-000100-200-RS	SATA power cable, MOLEX 5264-4P to SATA15P
19100-000323-00-RS	High-performance LGA1700 cooler, 65W (72 x 70 x 25.5 mm)
19100-000319-00-RS	High-performanc 1 U LGA1700 cooler, 65W (95 x 90 x 27.45 mm)
19800-000200-100-RS	RS-232/422/485 cable, 300mm, P=2.00, with bracket
TPM-IN03-R10	TPM2.0 module, software mangement tool
AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS

PICMG 1.3 Passive Backplane for Half-Size CPU Card

PICMG 1.3 (PCIe+PCI)	Model	HPXE2-5S1	HPXE2-8S1
Total Slot		5	8
Expansion Slots	PCIe x16	1 (Gen 3.0)	
	PCIe x8		2 (Gen 3.0)
	PCIe x4		
	PCIe x1		
	PCI-X		
	PCI	2	4
PSU Type		24+4-pin ATX	24+4-pin ATX
Chassis Option		PR-1500G	PAC-125G
		RACK-500AI	RACK-3000G RACK-360G
Note		ATX power	ATX power

 PAC series wall-mount chassis 4U rack-mount chassis

HPXE2-5S1-R10



HPXE2-8S1-R10

