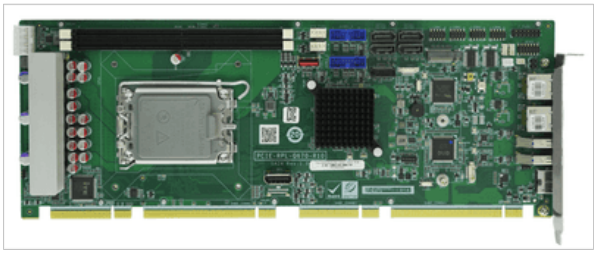
PCIE-RPL-Q670

Full-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, HD Audio and RoHS



Features

» Full-size PICMG 1.3 CPU Card supports LGA1700 Intel® 12th/13th/14th Gen. Core™ i9/i7/i5/i3/Pentium®/Celeron® CPU with Q670E

» Support two 5200 MHz Dual-Channel DDR5 SDRAM Unbuffered DIMMs

» Triple independent display via dual DP and HDMI™

» Support Intel® I226-LM and Intel® I226V 2.5GbE controller

» Support M.2 M key expansion

Specifications

Form Factor	
Form Factor	Full Size Single Board Computer
System	
CPU	LGA1700 socket supports 12th/13th/14th generation Alder Lake-S Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor (up to 65W)
Chipset	Intel® Q670E/Q670
Memory	two 288-pin 5200 MHz Dual-Channel DDR5 SDRAM Unbuffered DIMMs
Memory Max.	up to 96GB
Cooling method / System Fan	1 x CPU fan connector (1x4 pin)
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Physical Characteristics	
Dimensions (LxWxH) (mm)	338 mm x 126 mm
Net Weight	GW:1000g / NW:500g
Storage	
Storage	4 x SATA : 6Gb/s (RAID 0/1/5/10 supported)
I/O Interface	
Display Output	1 x HDMI™ : HDMI1.4 4K@30Hz
	2 x Display Port - 1 x DP1.4 4K@60Hz, 180° 1 x DP1.4 4K@60Hz, 180°(Option) (The DP interface is not plugged in. If needed, MOQ is 100.)
Ethernet	2 x LAN -
	LAN1: Intel® I226-LM 2.5GbE controller
	LAN2: Intel® I226-V 2.5GbE controller
Audio	HD Audio : 1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2 x 5 pin)
I/O Interface	2 x Internal RS-232 : 2x5 pin, P=2.54
	2 x Internal RS-232/422/485 : 2x5 pin, P=2.54 (RS485 support AFC)
	4 x Internal USB 2.0 : to backplane

	1 x DIO : 12-bit digital I/O (2x7 pin)
	2 x External USB 3.2 Gen2x1 : 10Gb/s
	1 x Internal USB 3.2 Gen2x1 : Type A 180°
	4 x Internal USB 3.2 Gen1x2 : 2 X 10 pin P=2.00 (5Gb/s)
	1 x I²C : 1x4 pin
Expansion	Description: 1 x PCIe Gen3 x16 & 4 x PCIe Gen3 x1 signal via golden finger
	4 x PCI signal via golden finger
Other Features	
TPM	Support TPM 2.0 (TPM-IN03 module) & Intel PTT
Power	
Power Consumption	3.3V@2.39A, 5V@9.68A, 12V@6.56A, 5VSB@0.35A
	(Intel® Core™ i9-12900 CPU with 16 GB 5600 MHz DDR5 memory, EuP mode disabled)
Power Supply	ATX/AT power supply
	Support AT/ATX mode
	ErP/EuP Compliant
Environment	
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~95%, non-condensing
Card Slot Interface	
M.2	1 x M.2 M Key (2242/2280, PCIe Gen3 x4) NVMe support

Ordering Information

PCIE-RPL-Q670-R10	Full-size PICMG 1.3 CPU Card supports LGA1700 Intel® 12th/13th Gen. Core™ i9/i7/i5/i3/Pentium®/Celeron® CPU with Q670E, DDR5, HDMI,iDPM display module,Dual Intel® 2.5GbE, USB 3.2, SATA 6Gb/s, M.2, HD Audio and RoHS

Packing List

1 x PCIE-RPL-Q670 single board computer	1 x mini jumper pack
1 x SATA cable	1 x QIG