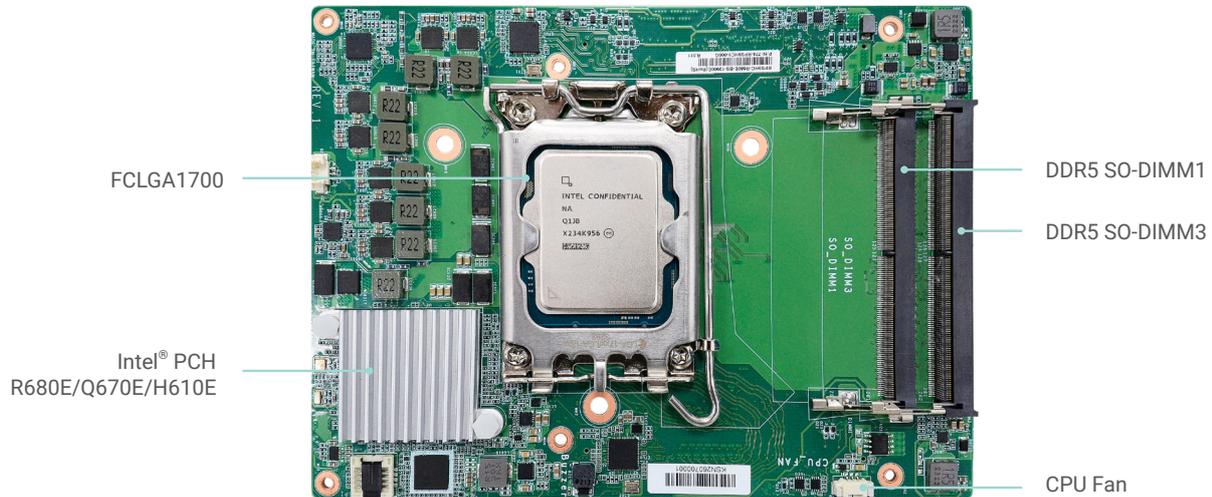
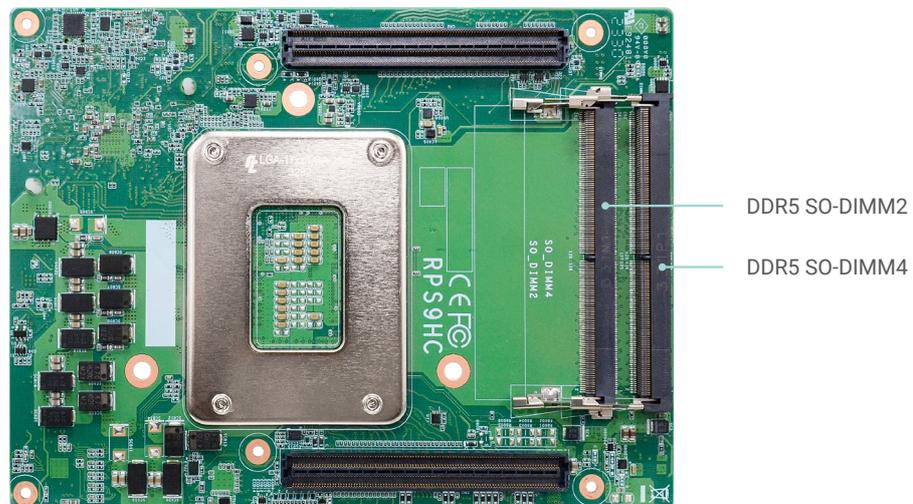


RPS9HC- R680E/ Q670E/H610E

BTL-S/14th/13th Gen Intel® Core™
COM HPC® Client Size C



Front View



Bottom View

KEY FEATURES



DDR5

4 DDR5 SODIMM up to 192GB



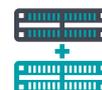
8K High Resolution

DDI supports up to 8K



Quad Displays

4 Display ports:
eDP + 3DDI



Multiple Expansion

1 PCIe x16 (Gen5),
4 PCIe x4 (Gen4),
2 PCIe x4 (Gen3),
2 PCIe x1 (Gen3)



RICH I/O

2 Intel 2.5GbE,
6 USB 3.2 Gen2,
8 USB 2.0

SPECIFICATION

SYSTEM	Processor	<p>Intel® Bartlett Lake-S Hybrid LGA 1700 Socket Processors</p> <p>Intel® Core™ 7 251E (24 Cores, 36M Cache, up to 5.6 GHz); 65W</p> <p>Intel® Core™ 7 251TE (24 Cores, 36M Cache, up to 5.4 GHz); 45W</p> <p>Intel® Core™ 5 221E (14 Cores, 24M Cache, up to 5.2 GHz); 65W</p> <p>Intel® Core™ 5 221TE (14 Cores, 24M Cache, up to 5.0 GHz); 45W</p> <p>Intel® Core™ 5 211E (10 Cores, 20M Cache, up to 4.9 GHz); 65W</p> <p>Intel® Core™ 5 211EF (10 Cores, 20M Cache, up to 4.9 GHz); 65W</p> <p>Intel® Core™ 5 211TE (10 Cores, 20M Cache, up to 4.8 GHz); 45W</p> <p>Intel® Core™ 3 201E (4 Cores, 12M Cache, up to 4.8 GHz); 60W</p> <p>Intel® Core™ 3 201EF (4 Cores, 12M Cache, up to 4.8 GHz); 60W</p> <p>Intel® Core™ 3 201TE (4 Cores, 12M Cache, up to 4.6 GHz); 45W</p> <p>14th Gen Intel® Core™ Processors, LGA 1700 Socket Processors, TDP support up to 65W</p> <p>Intel® Core™ i9-14900 (24 Cores, 36M Cache, up to 5.8 GHz); 65W</p> <p>Intel® Core™ i9-14900T (24 Cores, 36M Cache, up to 5.5 GHz); 35W</p> <p>Intel® Core™ i7-14700 (20 Cores, 33M Cache, up to 5.4 GHz); 65W</p> <p>Intel® Core™ i7-14700T (20 Cores, 33M Cache, up to 5.2 GHz); 35W</p> <p>Intel® Core™ i5-14500 (14 Cores, 24M Cache, up to 5.0 GHz); 65W</p> <p>Intel® Core™ i5-14500T (14 Cores, 24M Cache, up to 4.8 GHz); 35W</p> <p>Intel® Core™ i5-14400 (10 Cores, 20M Cache, up to 4.7 GHz); 65W</p> <p>Intel® Core™ i5-14400T (10 Cores, 20M Cache, up to 4.5 GHz); 35W</p> <p>Intel® Core™ i3-14100 (4 Cores, 12M Cache, up to 4.7 GHz); 60W</p> <p>Intel® Core™ i3-14100T (4 Cores, 12M Cache, up to 4.4 GHz); 35W</p> <p>13th Gen Intel® Core™ Processors, LGA 1700 Socket Processors, TDP support up to 65W</p> <p>Intel® Core™ i9-13900E (24 Cores, 36M Cache, up to 5.2 GHz); 65W</p> <p>Intel® Core™ i9-13900TE (24 Cores, 36M Cache, up to 5.0 GHz); 35W</p> <p>Intel® Core™ i7-13700E (16 Cores, 30M Cache, up to 5.1 GHz); 65W</p> <p>Intel® Core™ i7-13700TE (16 Cores, 30M Cache, up to 4.8 GHz); 35W</p> <p>Intel® Core™ i7-13700T (16 Cores, 30M Cache, up to 4.9 GHz); 35W</p> <p>Intel® Core™ i5-13500E (14 Cores, 24M Cache, up to 4.6 GHz); 65W</p> <p>Intel® Core™ i5-13500TE (14 Cores, 24M Cache, up to 4.5 GHz); 35W</p> <p>Intel® Core™ i5-13500T (14 Cores, 24M Cache, up to 4.6 GHz); 35W</p> <p>Intel® Core™ i5-13400E (10 Cores, 20M Cache, up to 4.6 GHz); 65W</p> <p>Intel® Core™ i3-13100E (4 Cores, 12M Cache, up to 3.3 GHz); 60W</p> <p>Intel® Core™ i3-13100TE (4 Cores, 12M Cache, up to 4.1 GHz); 35W</p> <p>Intel® Core™ i3-13100T (4 Cores, 12M Cache, up to 4.2 GHz); 35W</p>
	Chipset	Intel® R680E/Q670E/H610E Chipset
	Memory	<p>4pcs DDR5 SO-DIMM up to 192GB</p> <p>Dual Channel DDR5</p> <p>ECC support by R680 with i7 and i5</p>
	BIOS	AMI SPI 256Mbit
	GRAPHICS	Controller
	Feature	<p>OpenGL 4.5, DirectX 12, OpenCL 2.1</p> <p>HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9</p> <p>HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9</p>
	Display	<p>3 x DDI (HDMI/DP++) support to 8K</p> <p>1 x eDP support to 5K</p>
	Multiple Displays	eDP + 3 DDI
EXPANSION	Interface	<p>1 x PCIe x16 (Gen5)</p> <p>4 x PCIe x4 (Gen4)</p> <p>2 x PCIe x4 (Gen3)</p> <p>2 x PCIe x1 (Gen3)</p> <p>1 x eSPI</p> <p>1 x I2C</p> <p>1 x SMBus</p> <p>2 x UART (TX/RX/RTS/CTS)</p>
AUDIO	Audio Codec	HD Audio
ETHERNET	Phy	2 x Intel® I226 series (10/100/1000Mbps/2.5G)
I/O	USB	<p>4 x USB 3.2 Gen2</p> <p>8 x USB 2.0</p>
	SATA	2 x SATA 3.0 (up to 6Gb/s)
	GPIO	12 bit in/out
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds
SECURITY	TPM	TPM2.0 (Available Upon Request)
POWER	Type	<p>12V, 5VSB, VCC_RTC (ATX mode)</p> <p>12V, VCC_RTC (AT mode)</p>
	Consumption	<p>Typical: 12V @2.7A (32.4Watt)</p> <p>Max: 12V @24.2A (290.4Watt)</p>
OS SUPPORT	Microsoft	<p>Windows 10 IoT Enterprise 64-bit</p> <p>Windows 11</p>
	Linux	Ubuntu 20.04

SPECIFICATION

ENVIRONMENT	Temperature	Operating: 0 to 60°C Storage: -40 to 85°C	
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH	
	MTBF	TBD	
MECHANICAL	Dimensions	COM HPC® Client Size C	6.30" x 4.72" (160mm x 120mm)
	Compliance	PICMG COM HPC® R1.15, Client Size C	
STANDARDS AND CERTIFICATIONS	Certification	CE, FCC, RoHS	

ORDERING INFORMATION

Model Name	P/N	PCH	Display	USB3.2 Gen2	TPM 2.0	Thermal	Operating Temp.
RPS9HC-R680E-BS	770-RPS9HC1-000G	R680E	3 DDI + 1 eDP	4	1	Cooler	0~60°C
RPS9HC-Q670E-BS	770-RPS9HC1-100G	Q670E	3 DDI + 1 eDP	4	1	Cooler	0~60°C
RPS9HC-H610E-BS	770-RPS9HC1-200G	H610E	3 DDI + 1 eDP	4	1	Cooler	0~60°C

OPTIONAL ITEMS

• COM836 carrier board kit	770-COM8361-000G
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