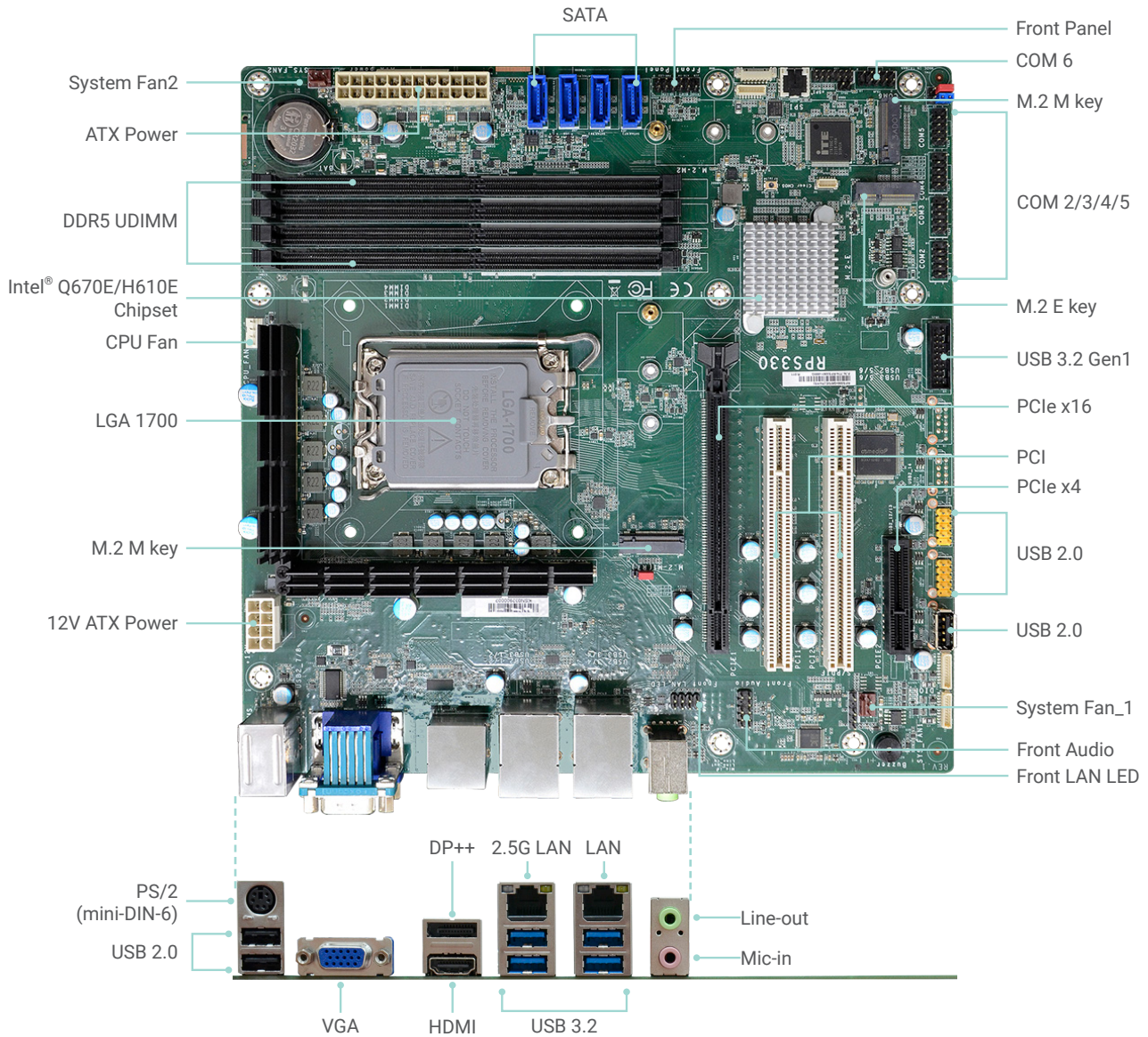


RPS330-Q670E/H610E

14th Gen Intel® Core™
Desktop
microATX



Top View

KEY FEATURES



DDR5

4 DDR5 UDIMM up to 128GB



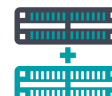
4K High Resolution

Supports 4K resolution



Triple Displays

VGA, DP++, HDMI



Multiple Expansion

1 PCIe x16, 1 PCIe x4,
2 PCI, 1 M.2 E key,
2 M.2 M key, 4 SATA 3.0



Rich I/O

1 Intel 2.5GbE, 1 Intel 1GbE, 6 COM,
USB 3.2 Gen 2 (Q670E 4x),
USB 3.2 Gen 1 (Q670E 6x, H610E 4x),
USB 2.0 (Q670E 7x, H610E 6x)

SPECIFICATION

SYSTEM	Processor	14th Generation Intel® LGA 1700 Socket Processors, TDP support up to 125W Intel® Core™ i9-14900 (24 Cores, 36M Cache, up to 2.0 GHz); 65W Intel® Core™ i9-14900T (24 Cores, 36M Cache, up to 1.1 GHz); 35W Intel® Core™ i7-14700 (20 Cores, 33M Cache, up to 2.1 GHz); 65W Intel® Core™ i7-14700T (20 Cores, 33M Cache, up to 1.3 GHz); 35W Intel® Core™ i5-14500 (14 Cores, 24M Cache, up to 2.6 GHz); 65W Intel® Core™ i5-14500T (14 Cores, 24M Cache, up to 1.7 GHz); 35W Intel® Core™ i3-14100 (4 Cores, 12M Cache, up to 3.5 GHz); 60W Intel® Core™ i3-14100T (4 Cores, 12M Cache, up to 2.7 GHz); 35W Intel® 300T (2 Cores, 6M Cache, up to 3.4 GHz); 35W	
	Chipset	Intel® Q670E/H610E Chipset	
	Memory	Four 288-pin UDIMM up to 128GB (ECC/Non-ECC) Dual Channel DDR5 up to 4400 MHz *Speed support list follow User's Manual	
	BIOS	AMI SPI 256Mbit	
GRAPHICS	Controller	Intel® HD Gen 9 Graphics	
	Feature	OpenGL 4.5, DirectX 12, OpenCL 2.1	
		HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9	
		HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9	
	Display	1 x VGA	VGA: resolution up to 1920x1200 @ 60Hz
1 x DP++		DP++: resolution up to 4096x2304 @ 60Hz	
1 x HDMI 2.0a		HDMI: resolution up to 4096x2160 @ 24Hz	
Triple Displays	VGA + DP++ + HDMI		
EXPANSION	Interface	1 x PCIe x16 (Gen 5) 1 x PCIe x4 (Gen 3) (co-lay M.2 M-key, function selected by BIOS.) 2 x PCI	
		1 x M.2 2230 E key (only Q670E support, PCIe/USB 2.0/Intel CNVi support) (Discrete Wifi 6E support) 1 x M.2 2242/2260/2280 M key (PCIe x2 NVMe/SATA/Intel RST support) 1 x M.2 2242/2260/2280 M key (PCIe x4 NVMe/Intel RST support) (co-lay PCIe x4 slot, function selected by BIOS.)	
AUDIO	Audio Codec	Realtek ALC888	
ETHERNET	Controller	[Q670E] 1 x Intel® I219-LM (Core i9/i7/i5 support iAMT, co-lay I226-LM)	
		[H610E] 1 x Intel® I219-V (co-lay I226-V) 1 x Intel® I226-V	
REAR I/O	Ethernet	1 x 2.5GbE (RJ-45) 1 x 1GbE (RJ-45)	
	Serial	1 x RS-232/422/485 (RS-232 w/ power) (DB-9)	
	USB	[Q670E] 4 x USB 3.2 Gen 2	
		[H610E] 4 x USB 3.2 Gen 1 2 x USB 2.0	
	PS/2	1 x PS/2 (mini-DIN-6)	
	Display	1 x DP++ 1 x HDMI 2.0a 1 x VGA	
	Audio	1 x Line-out 1 x Mic-in 1 x Line-in (opt. by request, MOQ required)	
INTERNAL I/O	Serial	1 x RS-232/422/485 (RS-232 w/ power) (2.54mm pitch) 4 x RS-232 (2.54mm pitch)	
	USB	[Q670E] 2 x USB 3.2 Gen1 4 x USB 2.0 (2.54mm pitch) 1 x USB 2.0 vertical Type A	
		[H610E] 2 x USB 2.0 (2.54mm pitch) 2 x USB 2.0 (2.54mm pitch), co-lay 1 x USB 2.0 vertical Type A	
	Audio	1 x Front Audio Header 1 x S/PDIF	
	SATA	4 x SATA 3.0 (up to 6Gb/s) (one port co-lay M.2 M-key (SATA)) (Q670E: RAID 0/1/5/10 ; H610E: N/A)	
	DIO	4-IN / 8-OUT DIO	
	SMBus	1 x SMBus	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	TPM	Nuvoton TPM 2.0	
POWER	Type	ATX	
	Connector	8-pin ATX 12V power	
		24-pin ATX power	
	Consumption	TBD	
RTC Battery	CR2032 Coin Cell		

SPECIFICATION

OS SUPPORT	Microsoft	Windows 10 IoT Enterprise 64-bit Windows 11 Enterprise	
	Linux	Linux	
ENVIRONMENT	Temperature	Operating: -5 to 65°C Storage: -30 to 60°C with RTC Battery; -40 to 85°C without RTC Battery	
	Humidity	Operating: 5 to 95% RH Storage: 5 to 95% RH	
	MTBF	TBD	
MECHANISM	Dimensions	microATX Form Factor	244mm (9.6") x 244mm (9.6")
	Height	PCB: 1.6mm Top Side: TBD Bottom Side: TBD	
STANDARDS AND CERTIFICATIONS	Certifications	CE, FCC Class B, RoHS	

PACKING LIST

• 1 RPS330-Q670E/H610E motherboard	
• 1 COM port cable (Length: 300mm, 2 x COM ports)	A81-015026-023G
• 1 Serial ATA data cable (Length: 500mm)	332-553001-005G
• 1 I/O shield	