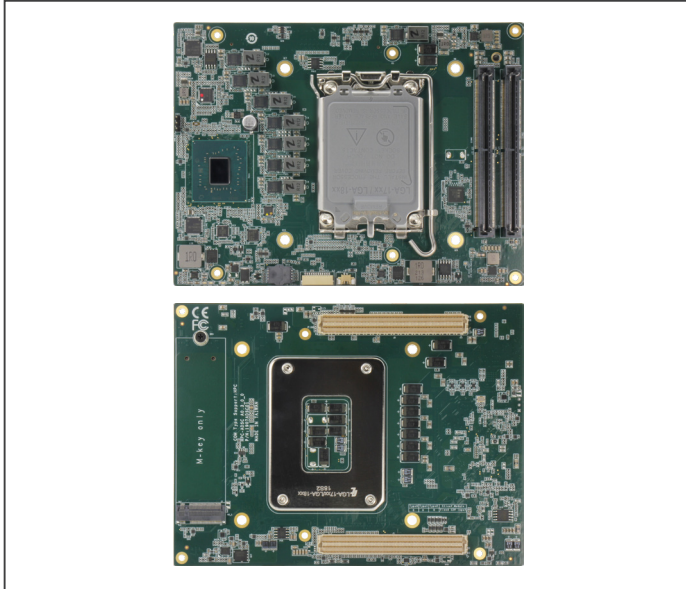


HPC-ADSC / HPC-RPSC

COM HPC Client Size C with 12th/13th Generation Intel® Core™ Platform



Specifications

System	
Form Factor	COM-HPC R1.0 Client Size C
CPU	12th/13th Gen Intel® Core™ Series LGA1700 Processors (Formerly Alder Lake-S/Raptor Lake-S)
CPU Frequency	Up to 2.30 GHz, 16 Core, i9-12900E
Chipset	Intel® R680E
Memory Type	DDR5 4800MHz SODIMM x 2
Max. Memory Capacity	Up to 64GB (ECC)
BIOS	AMI BIOS (UEFI)
Wake on LAN	Yes
Watchdog Timer	255 Levels
Power Requirement	+12V and +5VSB for ATX, +12V for AT
Power Supply Type	AT/ATX
Power Consumption (Typical)	7.13A@12V, i9-12900E
Dimension (L x W)	6.30" x 4.72" (160mm x 120mm)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
Certification	CE / FCC Class A
Display	
Graphic Controller	Intel®UHD Graphics 770
Video Output	eDP x 1, DDI x 3
I/O	
Ethernet	2.5GbE: Intel® I226LM x 2
Audio	—
USB Port	USB 3.2 x 4 (Type-C, 20Gbps x 2, 10Gbps x 2) USB 3.2 x 2 (Type-A, 10Gbps) USB 2.0 x 8
Serial Port	4-Wire UART x 2
HDD Interface	SATA III x 2
Expansion Slot	M.2 2280 M-Key PEG [x16] x 1, split to PEG [x8] x 2 by BOM PCIe [x4] x 3 PCIe [x1] x 8 eSPI x 1 SPI x 1 I2C x 1 SMBus x 1
GPIO	12-bit
Onboard Storage	—
TPM	TPM 2.0

Features

- 12th/13th Gen Intel® Core™ Series LGA1700 Processors (Formerly Alder Lake-S/Raptor Lake-S)
- Intel® R680E Series Chipset
- DDR5 w/ECC 4800MHz SODIMM x 2, up to 64GB
- 2.5GbE x 2
- M.2 2280 M-Key x 1
- SATA III x 2
- PCIe Gen 5 [x16] x 1, PCIe Gen 4 [x4] x 3, PCIe Gen 3 [x1] x 8
- USB 3.2 x 6 (up to 20Gbps x 2, 10Gbps x 4)
- GPIO x 12, SMBus, I2C x 1
- COM HPC Client Type, Size C (160mm x 120mm)



Packing List

- HPC-RPSC-A10-0001**
COM HPC Client Size C.FCLGA1700 CPU skt.R680E.2xDDR5.3xDDI.eDP.2xi226.TPM2.0.for RPS.A1.0

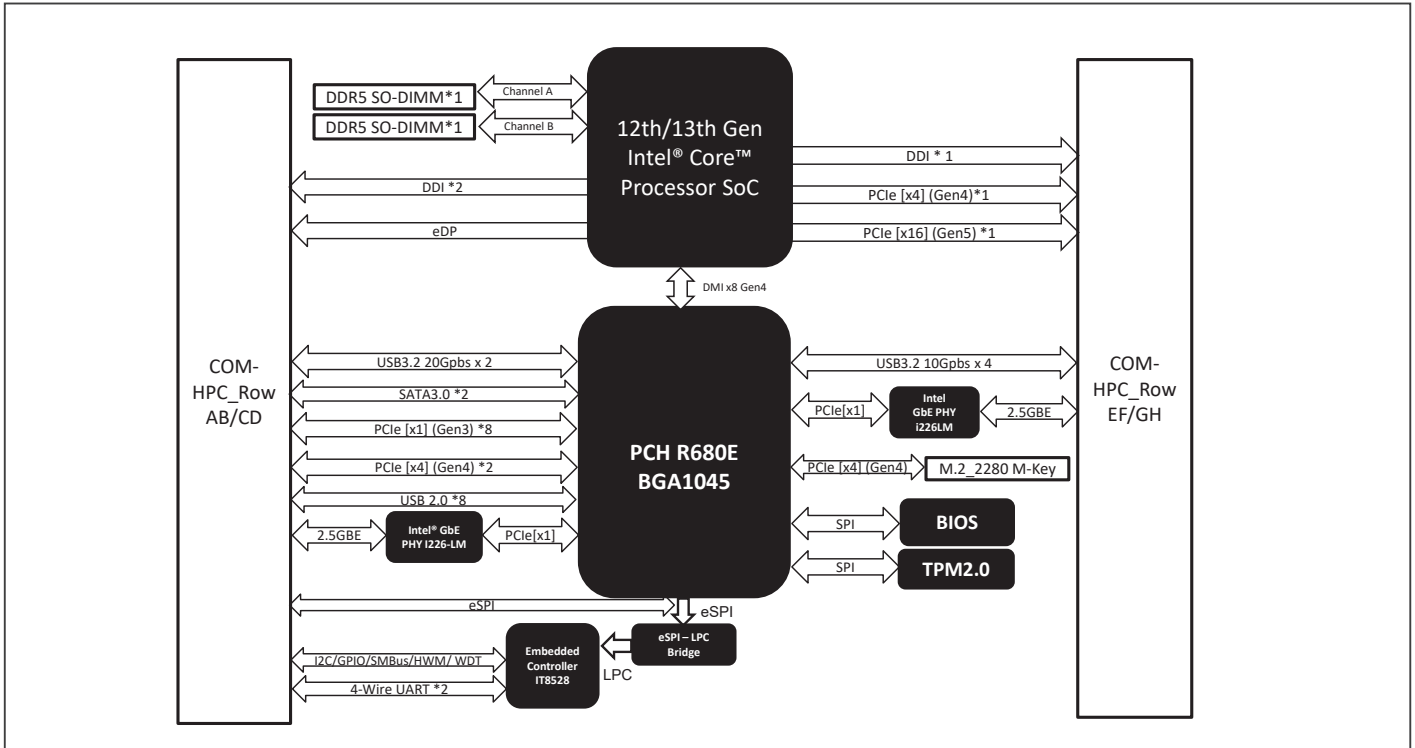
Optional Accessories

- HPC-RPSC-FAN01**
COM HPC Client Size C.LGA1700 CPU skt.R680E.2xDDR5.3xDDI.eDP.2xi226.TPM2.0.A1.0
- ECB-980A-A10-0001**
COM HPC Client Carrier.Size A/B/C.HDMI.DP.2GbE.3USB(TypeC).2SATA.PCIe.ATX.A1.0

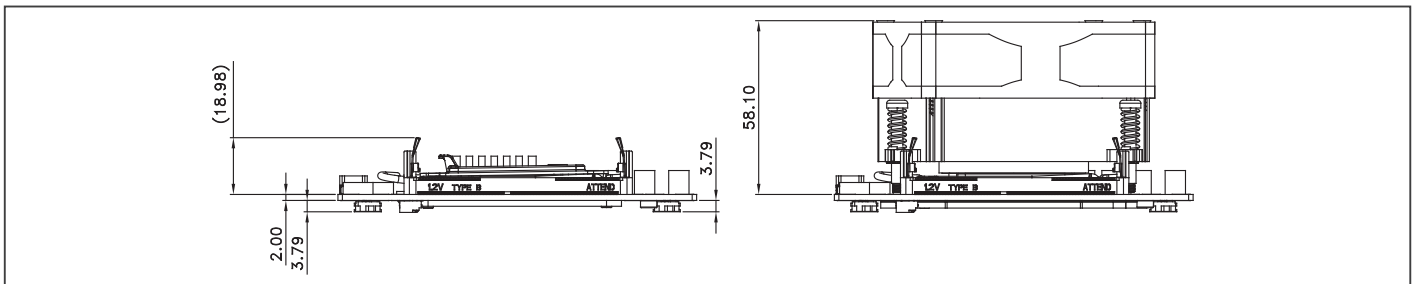
CPU Support Chart

CPU	Core / Thread	Performance-core/Efficient-core Base Frequency	Performance-core/Efficient-core Max Turbo Frequency	Operating Temperature Range	TDP	Graphic
i9-12900E	16c/24t	2.30GHz/1.70GHz	5.00GHz/3.80GHz	0-60°C	65W	Intel® UHD Graphics 770
i7-12700E	12c/20t	2.10GHz/1.60GHz	4.80GHz/3.60GHz	0-60°C	65W	Intel® UHD Graphics 770
i5-12400	6c/12t	2.50GHz/-	4.40GHz/-	0-60°C	65W	Intel® UHD Graphics 730
i9-12900TE	16c/24t	1.10GHz/1.00GHz	4.80GHz/3.60GHz	0-60°C	35W	Intel® UHD Graphics 730
i5-12400T	6c/12t	1.80GHz/-	4.20GHz/-	0-60°C	35W	Intel® UHD Graphics 730
i3-12100TE	4c/8t	2.10GHz/-	4.00GHz/-	0-60°C	35W	Intel® UHD Graphics 730
G7400E	2c/4t	3.60GHz/-	—	0-60°C	46W	Intel® UHD Graphics 710
G6900TE	2c/2t	2.40GHz/-	—	0-60°C	35W	Intel® UHD Graphics 710
i9-13900E	24c/32t	1.80GHz/1.30GHz	5.20GHz/4.00GHz	0-60°C	65W	Intel® UHD Graphics 770
i9-13900	24c/32t	2.00GHz/1.50GHz	5.20GHz/4.20GHz	0-60°C	65W	Intel® UHD Graphics 770
i7-13700E	16c/24t	1.90GHz/1.30GHz	5.10GHz/3.90GHz	0-60°C	65W	Intel® UHD Graphics 770
i5-13500E	14c/20t	2.40GHz/1.50GHz	4.60GHz/3.30GHz	0-60°C	65W	Intel® UHD Graphics 770
i9-13900TE	24c/32t	1.00GHz/800MHz	5.00GHz/3.90GHz	0-60°C	35W	Intel® UHD Graphics 770
i7-13700T	16c/24t	1.40GHz/1.00GHz	4.80GHz/3.60GHz	0-60°C	35W	Intel® UHD Graphics 770
i3-13100TE	4c/8t	2.40GHz/-	4.10GHz/-	0-60°C	35W	Intel® UHD Graphics 730
i3-13100T	4c/8t	2.50GHz/-	4.20GHz/-	0-60°C	35W	Intel® UHD Graphics 730

Block Diagram Unit: mm



Dimension Unit: mm



Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	UART	Expansion	Power	Temperature	Other
HPC-RPSC-A10-0001	COM-HPC	12th/13th Gen Intel® Core™ Series	DDR5 x 2	DDI x 3	eDP	M.2 2280 M-Key	i226-LM x 2	USB 2.0 x 8, USB 3.2 x 5 (Up to Gen 2 support)	4-Wire UART x 2	PEG[x16] x1 PCIe [x4] x3 PCIe [x1] x8	12V	0°C - 60°C	eSPI, SPI, I2C, SMBus, GPIO