

Features

- Intel® R680E chipset
- Intel® 12/13/14th Core™ i9/i7/i5/i3 Processor, supports up to 65W Max
- 4 x 262-Pin DDR5 S0-DIMM supports up to 128GB, 3600MT/s, optional ECC support (CPU depending)
- 1 x PCIe x16 Gen5, 1 x PEG x4 Gen4 , 3 x PCIe x4 Gen4, 2 x PCIe4 Gen 3 (from PCH), 1 x PCIe1 Gen3 for BMC (own by the customer)
- 2 x Intel® i226-LM 2.5G Gigabit Ethernet Controller
- 3 x DDI, 1 x eDP
- 4 x USB3.2 Gen2x2, 8 x USB2.0, 2x SATAIII
- 1 x Audio, 1 x I²C, 1 x SMBus
- Standard 0°C ~ 60°C (32°F ~ 140°F)



DDR5
S0-DIMM



USB 3.2



DP



HDMI

Specifications

System Information

Processor	Intel® 12/13/14th Core™ i9/i7/i5/i3 Processor, supports LGA 1700 CPU Up to 65W Max
Platform Controller Hub	Intel® R680E chipsets
System Memory	4 x 262-Pin DDR5 S0-DIMMs support up to 128GB, 3600MT/s, optional ECC support (CPU depending)
I/O Chipset	EC iTE IT5782
Watchdog Timer	H/W Reset, 1Sec. ~ 65535Sec. and 1Sec./Step
BIOS	AMI uEFI BIOS, 256 Mbit SPI Flash ROM
H/W Status Monitor	Monitoring System Temperature Voltage and FAN Status with Auto Throttling Control
TPM	Optional TPM 2.0

Expansion

Expansion	1 x PCIe x16 Gen5 1 x PEG x4 Gen4 3 x PCIe x4 Gen4 2 x PCIe4 Gen 3 (from PCH) 1 x PCIe1 Gen3 for BMC (owned by carrier board)
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Display

Graphic Chipset	Intel® UHD Graphics 770 up to 32EUs
Spec. & Resolution	3 x DDI ports support configurable DP1.4a or HDMI2.1b 1 x eDP1.4b
Multiple Display	Quadruple Independent Displays

Ethernet

LAN Chipset	2 x Intel® i226LM 2.5G Gigabit Ethernet Controller
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Software Support

OS	Windows 11 LTSC Linux
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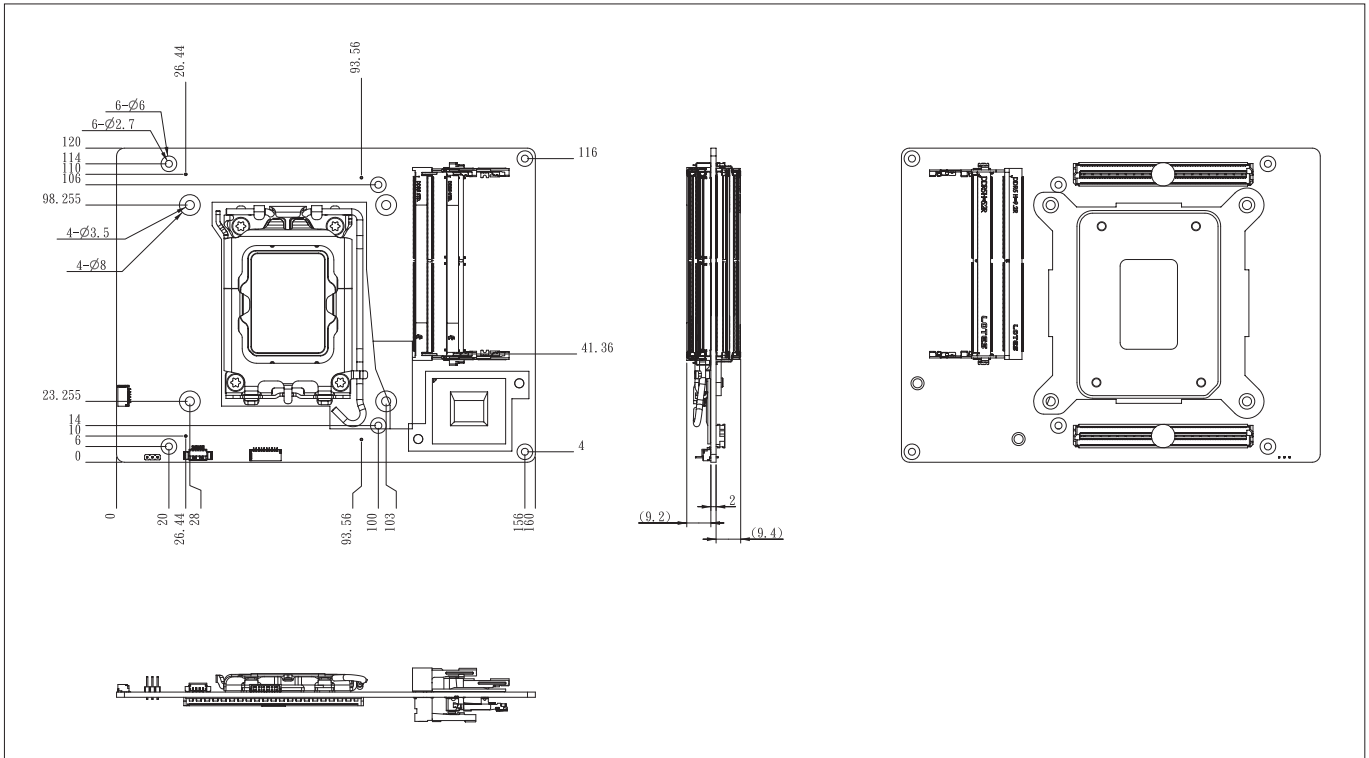
I/O

USB	4 ports support USB3.2 Gen2x2 8 ports support USB2.0
SMBus	1 port supports SMBus
SATA	2 ports support SATAIII
DIO	12 ports support GPIO
Other	1 x Smart FAN on COM-HPC module 1 port supports Smart FAN for carrier Each 1 port supports Audio, I ² C, SPI
UART	2 x UART (2 wire)

Mechanical & Environmental

Operating Temp.	With CPU cooler, supports 0°C ~ 60°C (32°F ~ 140°F) with 0.5m/s air flow
Storage Temp.	-20°C ~ 75°C (-4°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Dimension (L x W)	160 x 120mm (COM-HPC Client size C)

Mechanical Drawing



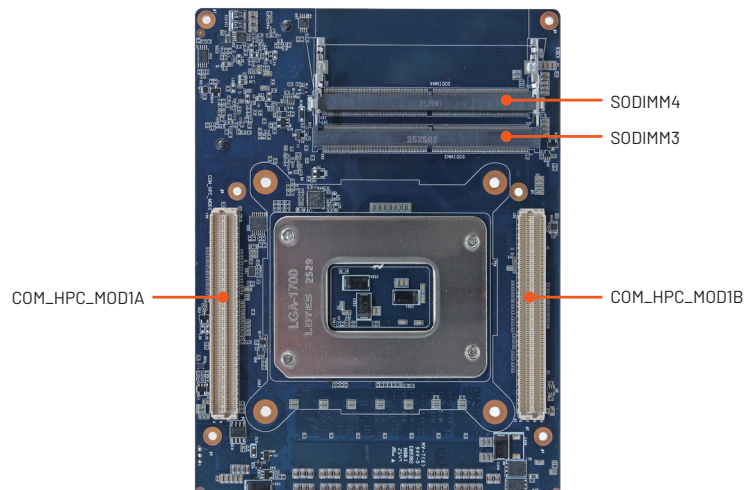
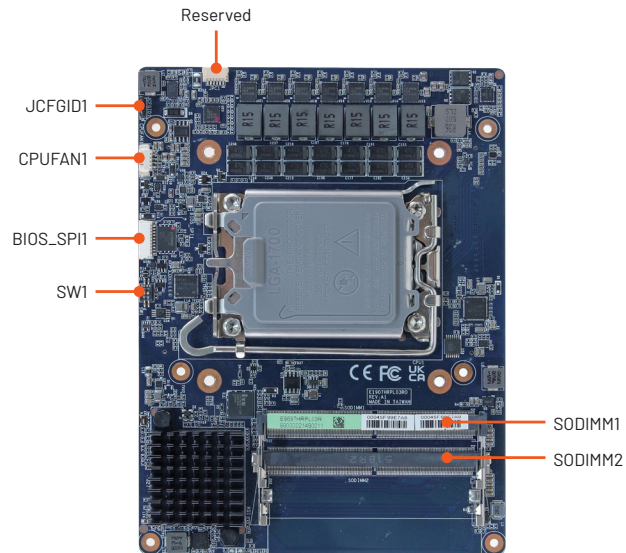
Ordering Information

P/N	CPU	Chipset	LAN	eDP	USB3.2	USB2.0	PCIe Slot	TPM	Operating Temp.	Thermal Solution
ESM-HRPL-R68-A1R	Intel® 12/13/14th Gen, ADL/RPL/RPL-Refresh/Barlett Lake-S Core™ i9/i7/i5/i3 Processor, supports LGA 1700 CPU Up to 65W Max	Intel® R680E	2	eDP	4	8	8	Onboard TPM 2.0 (Optional)	0°C ~ 60°C (32°F ~ 140°F) with 0.5m/s air flow	Cooler

Packing List

Item	P/N
E195TTESHRL00R	Back Plate for CPU
E196112X650000R	CPU Cooler 4P/12V/FAN 122.4 x 120 x 38
E19612X1650000R	HEAT-SPREADER 120 x 120 x 13.0mm 65W

I/O Overview



Block Diagram

