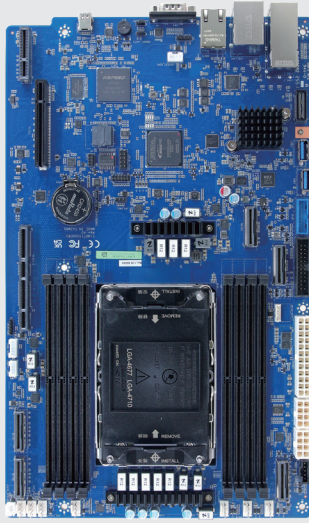


# HPM-GNRUP

Single Intel®Xeon® 6 Processor Proprietary Server Board with IPMI2.0. Processor supports up to 350W TDP



## Features

- Intel LGA4710 Socket supports Intel® Xeon® 6 6500P & 6700P series Processor (Max. TDP at 350W)
- 8 x DDR5 6400 MHz RDIMM & 8000 MHz MRDIMM up to 2TB
- TPM 2.0 onboard
- IPMI 2.0 with AST 2600 BMC controller onboard.
- 1 x Intel I210AT 1GbE controller
- 1 x Intel E610-XAT2 10GbE controller supports 2 x 10GbE Ethernet ports
- 1 x RS232 port
- 1 x Mini DP port
- 2 x USB 3.2 Gen1 ports at Edge I/O
- 5 x M.2 connectors (SFF-TA-1016)
- 13" x 8" (330.2mm x 203.2mm), PCB thickness is 2.79 mm



Intel®Xeon® 6 Processor



8 x DDR5 RDIMM 6400MHz & MRDIMM 8000MHz



IPMI 2.0 Supported



10GbE



PCIe Gen5 Multiple Expansion

## Specifications

### System Information

Processor	Intel LGA4710 Socket supports Intel® Xeon® 6 6500P & 6700P series Processor (Max. TDP at 350W )
System Memory	8 x DDR5 6400 MHz RDIMM & 8000 MHz MRDIMM Up to 2TB
Watchdog Timer	System reset event 0 ~ 6553 seconds
BIOS	AMI UEFI BIOS
H/W Status Monitor	CPU temperature Fan speed and voltage monitoring Fan speed control Case open detection
TPM	TPM 2.0 onboard
IPMI	IPMI 2.0 with AST 2600 BMC controller onboard

### Rear I/O

USB	2 x USB 3.2 Gen1 ports
COM Port	1 x RS232 port
DP	1 x Mini DP port
RJ-45	4 x RJ45 MGMT port for dedicated IPMI access only LAN1 port for 1GbE shared with IPMI access LAN2 and 3 ports for 10GbE

### Display

Graphic Chipset	AST2600 BMC controller
Resolution	1 x Mini DP port 1920 x 1200 @ 60Hz 32bpp

### Expansion

Expansion	1 x PCIe Gen5 x32 slot, 1 x PCIe Gen5 x8 slot Slot 1, PCIe Gen5 x32 Slot 2, PCIe Gen5 x8 (This Slot is closest to the CPU)
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### I/O

USB	2 x Internal USB 3.2 Gen1 ports 1 x Internal USB 3.2 Gen1 type A receptacle 1 x Internal USB 2.0 ports
Other	5 x M.2 connectors (SFF-TA-1016)
CMOS Battery	1 x Horizontal Socket Type CMOS Battery Holder with CR2450
<b>Ethernet</b>	
LAN Chipset	1 x Intel I210AT 1GbE controller 1 x Intel E610-XAT2 10GbE controller supports 2 x 10GbE Ethernet ports
LAN Port	4 x RJ45 MGMT port for dedicated IPMI access only LAN1 port for 1GbE shared with IPMI access LAN2 and 3 ports for 10GbE

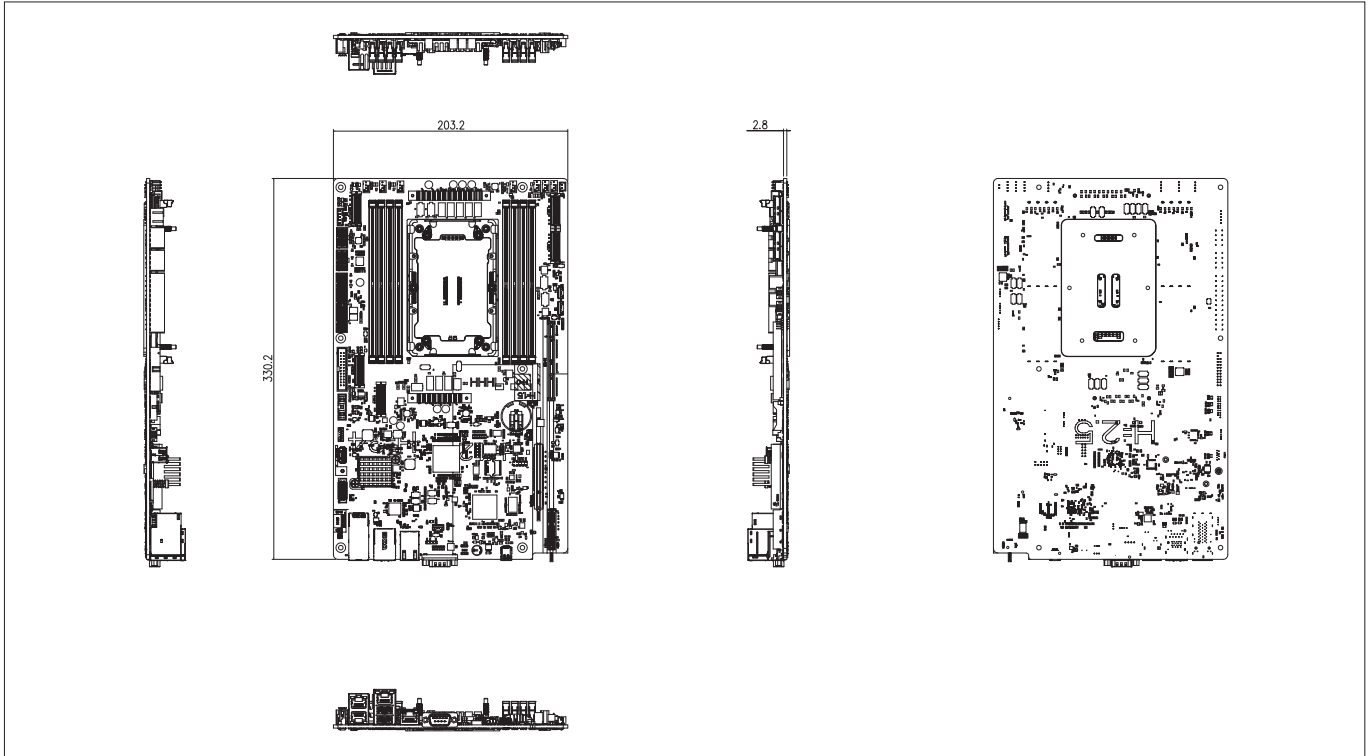
### Mechanical & Environmental

Operating Temp.	0 ~ 55°C (32 ~ 131°F) to support up to 350W TDP CPU 0 ~ 55°C (32 ~ 131°F) to support up to 270W TDP CPU
Storage Temp.	-40 ~ 85°C
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Power Connector	1 x Std. 24 Pin ATX connector 2 x 8 Pin SSI 12V connectors
Dimension (L x W)	13" x 8" (330.2mm x 203.2mm), PCB thickness is 2.79 mm

### Software Support

OS	Windows 11 SAC and LTSC Windows Server 2025 Ubuntu 24.04 Red Hat Enterprise Linux (RHEL) 8.0 or above
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## Mechanical Drawing



## Ordering Information

Model Name	P/N	CPU	Chipset	Memory	PCIe Slot	10GbE/2.5GbE/1GbE	M.2	USB 3.2 Gen2/USB 3.2 Gen1/USB 2.0	TPM 2.0
HPM-GNRUP	HPM-GNRUPA-A1R	1	NA	8	2	2/0/1	0	0/5/1	1

## Packing List

Item	P/N	Quantity
HPM-GNRUP motherboard	HPM-GNRUPAA-A1R	1
LGA4710 CPU carrier-E2B	E199TR00082R	1

## Optional Items

Item	P/N
CPU Cooler for LGA4710 1U passive (Only for HPS-GNRU1A use)	E1961251C50000R
LGA4710 CPU carrier-E2A	E199TR00081R

## CPU Support List (HPC Only)

SKU	Launch Date	# of Cores	# of Threads	Processor Base Frequency	Max Turbo Frequency	TDP (W)
Intel® Xeon® 6740P	Q1'25	48	96	2.1 GHz	3.8 GHz	270
Intel® Xeon® 6781P (Only HPM-GNRUA use)	Q1'25	80	160	2.0 GHz	3.8 GHz	350
Intel® Xeon® 6530P	Q1'25	32	64	2.3 GHz	4.1 GHz	225
Intel® Xeon® 6520P	Q1'25	24	48	2.4 GHz	4.0 GHz	210
Intel® Xeon® 6731P (Only HPM-GNRUA use)	Q1'25	32	64	2.5 GHz	4.1 GHz	245
Intel® Xeon® 6521P (Only HPM-GNRUA use)	Q1'25	24	48	2.6 GHz	4.1 GHz	225
Intel® Xeon® 6736P	Q1'25	36	72	2.0 GHz	4.1 GHz	205
Intel® Xeon® 6517P	Q1'25	16	32	3.2 GHz	4.2 GHz	190
Intel® Xeon® 6515P	Q1'25	16	32	2.3 GHz	3.8 GHz	150
Intel® Xeon® 6505P	Q1'25	12	24	2.2 GHz	4.1 GHz	150
Intel® Xeon® 6780E	Q2'24	144	144	2.2 GHz	3.0 GHz	330
Intel® Xeon® 6766E	Q2'24	144	144	1.9 GHz	2.7 GHz	250
Intel® Xeon® 6756E	Q2'24	128	128	1.8 GHz	2.6 GHz	225
Intel® Xeon® 6740E	Q2'24	96	96	2.4 GHz	3.2 GHz	250
Intel® Xeon® 6710E	Q2'24	64	64	2.4 GHz	3.2 GHz	205

## Block Diagram

