

# HPM-ERSUA

**Single 5th Generation Intel® Xeon® Scalable Processor ATX Server Board with Intel® C741 Chipset and IPMI2.0. Processor supports up to 270W TDP**



## Product Features

- Intel LGA4677 Socket supports 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W)
- 6 x DDR5 5600 MHz RDIMM up to 1.5TB
- IPMI 2.0 with AST 2600 BMC controller onboard
- 1 x Intel I226LM 2.5Giga-bit Ethernet
- 5 x SATA III Support RAID 0,1,5,10
- 4 x USB 3.2 Gen1 ports & 2 x USB 2.0 ports at Edge I/O
- 1 x M.2 M-Key PCIe 3.0 x4 NVMe SSD, 2242/2260/2280/22110 form factor
- Intel® C741 Chipset
- TPM 2.0 onboard
- 1 x Intel I210AT 1Giga-bit Ethernet
- 1 x Intel X550-AT2 10Giga-bit Ethernet
- 1 x RS232 port
- 4 x Internal USB 3.2 Gen1 ports
- 12" x 9.6" (304.8mm x 243.84mm), PCB thickness is 2.54mm

## Specification

### System Information

Processor	Intel LGA4677 Socket supports 5th Generation Intel® Xeon® Scalable Processor (Max. TDP at 270W)
Platform Controller Hub	Intel® C741 Chipset
System Memory	6 x DDR5 5600 MHz RDIMM up to 1.5TB
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

<b>USB</b>	4 x USB 3.2 Gen1 ports 2 x USB 2.0 ports
<b>COM Port</b>	1 x RS232 port
<b>RJ-45</b>	5 x RJ45 MGMT port for dedicated IPMI access only LAN1 port for 1GbE shared with IPMI access LAN2 port for 2.5GbE LAN3 and 4 ports for 10GbE
<b>VGA</b>	1 x VGA port

## Display

<b>Graphic Chipset</b>	AST2600 BMC controller
<b>Resolution</b>	1 x VGA port VGA: 1920 x 1200 @ 60Hz 32bpp

## Expansion

<b>Expansion</b>	4 x PCIe Gen5 x16 slots and 3 x PCIe Gen5 x4 slots Slot 1, PCIe 5.0 x16 Slot 2, PCIe 5.0 x4 Slot 3, PCIe 5.0 x16 Slot 4, PCIe 5.0 x4 Slot 5, PCIe 5.0 x16 Slot 6, PCIe 5.0 x4 Slot 7, PCIe 5.0 x16 (Slot 7 is the slot closest to CPU)
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## Storage

<b>M.2</b>	1 x M.2 M-Key PCIe 3.0 x4 NVMe SSD, 2242/2260/2280/22110 form factor
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## I/O

<b>USB</b>	4 x Internal USB 3.2 Gen1 ports
<b>SATA</b>	5 x SATA III (Note:SATA 1~4 support RAID 0,1,5,10)
<b>Serial</b>	1 x Internal RS232 port
<b>CMOS Battery</b>	1 x Horizontal Socket Type CMOS Battery Holder with CR2450

## Ethernet

<b>LAN Chipset</b>	1 x Intel I210AT Giga-bit Ethernet 1 x Intel I226LM 2.5Giga-bit Ethernet 1 x Intel X550-AT2 10Giga-bit Ethernet
<b>LAN Port</b>	5 x RJ45 MGMT port for dedicated IPMI access only LAN1 port for 1GbE shared with IPMI access LAN2 port for 2.5GbE LAN3 and 4 ports for 10GbE

## Mechanical & Environmental

<b>Operating Temp.</b>	0 ~ 55°C (32 ~ 131°F) to support up to 250W TDP CPU 0 ~ 45°C (32 ~ 113°F) to support up to 270W TDP CPU
<b>Storage Temp.</b>	-40 ~ 85°C
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Weight</b>	1.19KG
<b>Power Connector</b>	1 x Std. 24 Pin ATX connector 3 x 8 Pin SSI 12V connectors
<b>Dimension (L x W)</b>	12" x 9.6" (304.8mm x 243.84mm), PCB thickness is 2.54mm

## Software Support

<b>OS</b>	Windows 10 IoT Enterprise LTSC 2021 Windows 11 Windows Server 2019 Windows Server 2022 Ubuntu 21.1, 22.04 LTS or later Red Hat Enterprise Linux (RHEL) 8.2 and later
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## Ordering Information

<b>Ordering Information</b>	HPM-ERSUAA-A1R ATX 1xLGA4677 Intel 5th Gen.C741/X550 6xDDR5/4xPCIe16/2x10GbE/1x1GbE/1x2.5GbE/8xUSB3/5xSATA3 HPM-ERSUAL-A1R ATX 1xLGA4677 Intel 5th Gen.C741 6xDDR5/4xPCIe16/1x1GbE/1x2.5GbE/8xUSB3/5xSATA3
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## CPU Support List

Processor	# of Cores	# of Threads	Processor Base Frequency	Max Turbo Frequency	TDP
Intel® Xeon® Gold 6548Y+	32	64	2.5 GHz	4.1 GHz	250
Intel® Xeon® Gold 6526Y	16	32	2.8 GHz	3.9 GHz	195
Intel® Xeon® Gold 5515+	8	16	3.2 GHz	4.1 GHz	165
Intel® Xeon® Gold 6530	32	64	2.1 GHz	4.0 GHz	270
Intel® Xeon® Gold 5520+	28	56	2.2 GHz	4.0 GHz	205
Intel® Xeon® Silver 4516Y+	24	48	2.2 GHz	3.7 GHz	185
Intel® Xeon® Silver 4514Y	16	32	2.0 GHz	3.4 GHz	150

<b>Intel® Xeon® Gold 6448Y</b>	32	64	2.1 GHz	4.1 GHz	225
<b>Intel® Xeon® Gold 6426Y</b>	16	32	2.5 GHz	4.1 GHz	185
<b>Intel® Xeon® Gold 6418H</b>	24	48	2.1 GHz	4.0 GHz	185
<b>Intel® Xeon® Gold 5415+</b>	8	16	2.9 GHz	4.1 GHz	150
<b>Intel® Xeon® Gold 5420+</b>	28	56	2.0 GHz	4.1 GHz	205
<b>Intel® Xeon® Gold 5418Y</b>	24	48	2.0 GHz	3.8 GHz	185
<b>Intel® Xeon® Silver 4416+</b>	20	40	2.0 GHz	3.9 GHz	165
<b>Intel® Xeon® Silver 4410Y</b>	12	24	2.0 GHz	3.9 GHz	150
<b>Intel® Xeon® Silver 4410T</b>	10	20	2.7 GHz	4.0 GHz	150
<b>Intel® Xeon® Bronze 3408U</b>	8	8	1.8 GHz	1.9 GHz	125
<b>Intel® Xeon® Gold 6430</b>	32	64	2.10 GHz	3.40 GHz	270