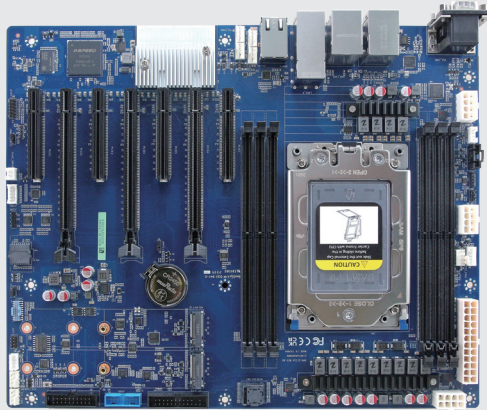


HPM-SIEUA

AMD single 4th Generation EPYC 8004 Processor ATX Server Board with IPMI2.0. Processor supports up to 225W TDP



Features

- AMD SP6 Socket supports 4th Generation AMD EPYC Processor (Max. TDP at 225W)
- 6 x DDR5 4800/ 4400 MHz RDIMM up to 1.5TB
- TPM 2.0 onboard
- IPMI 2.0 with AST 2600 BMC controller onboard
- 1 x Intel I210AT 1GbE controller
- 1 x Intel I226-LM 2.5GbE controller
- 1 x Intel X550AT2 10GbE controller supports 2 x 10GbE Ethernet ports
- 4 x SATA III (1 x Mini-SAS HD 4i (for 4 xSATA or 1 x4 NVMe interface)
- 1 x RS232 port, 4 x USB 3.2 Gen1 ports at Edge I/O, 2 x Internal USB 3.2 Gen1 ports
- 2 x M.2 M-Key Slots to support PCIe 5.0 x4 NVMe SSD/SATA 2260/2280/22110 form factor



4th Gen. AMD EPYC 8004 Processor



6 x DDR5 RDIMM 4800/4400MHz



IPMI 2.0 supported



10GbE



PCIe Gen5 multiple expansion

Specifications

System Information

Processor	AMD SP6 Socket supports 4th Generation AMD EPYC Processor (Max. TDP at 225W)
System Memory	6 x DDR5 4800/ 4400 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

USB	4 x USB 3.2 Gen1 ports
COM Port	1 x RS232 port
RJ-45	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
VGA	1 x VGA port

Display

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

Expansion

Expansion	3 x PCIe Gen5 x16 slots and 4 x PCIe Gen5 x8 slots Slot 1, PCIe 5.0 x8 Slot 2, PCIe 5.0 x16 Slot 3, PCIe 5.0 x8 Slot 4, PCIe 5.0 x16 Slot 5, PCIe 5.0 x8 Slot 6, PCIe 5.0 x16 Slot 7, PCIe 5.0 x8 (Slot 7 is the slot closest to CPU)
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Storage

M.2	2 x M.2 M-Key PCIe 5.0 x4 NVMe SSD/SATA , 2260/2280/22110 form factor
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I/O

USB	2 x Internal USB 3.2 Gen1 ports
SATA	4 x SATA III (1 x Mini-SAS HD 4i (for 4 xSATA or 1 x4 NVMe interface)
Serial	1 x Internal RS232 port
CMOS Battery	1 x Horizontal Socket Type CMOS Battery Holder with CR2450

Ethernet

LAN Chipset	1 x Intel I210AT 1GbE controller 1 x Intel I226-LM 2.5GbE controller 1 x Intel X550AT2 10GbE controller supports 2 x 10GbE Ethernet ports
LAN Port	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

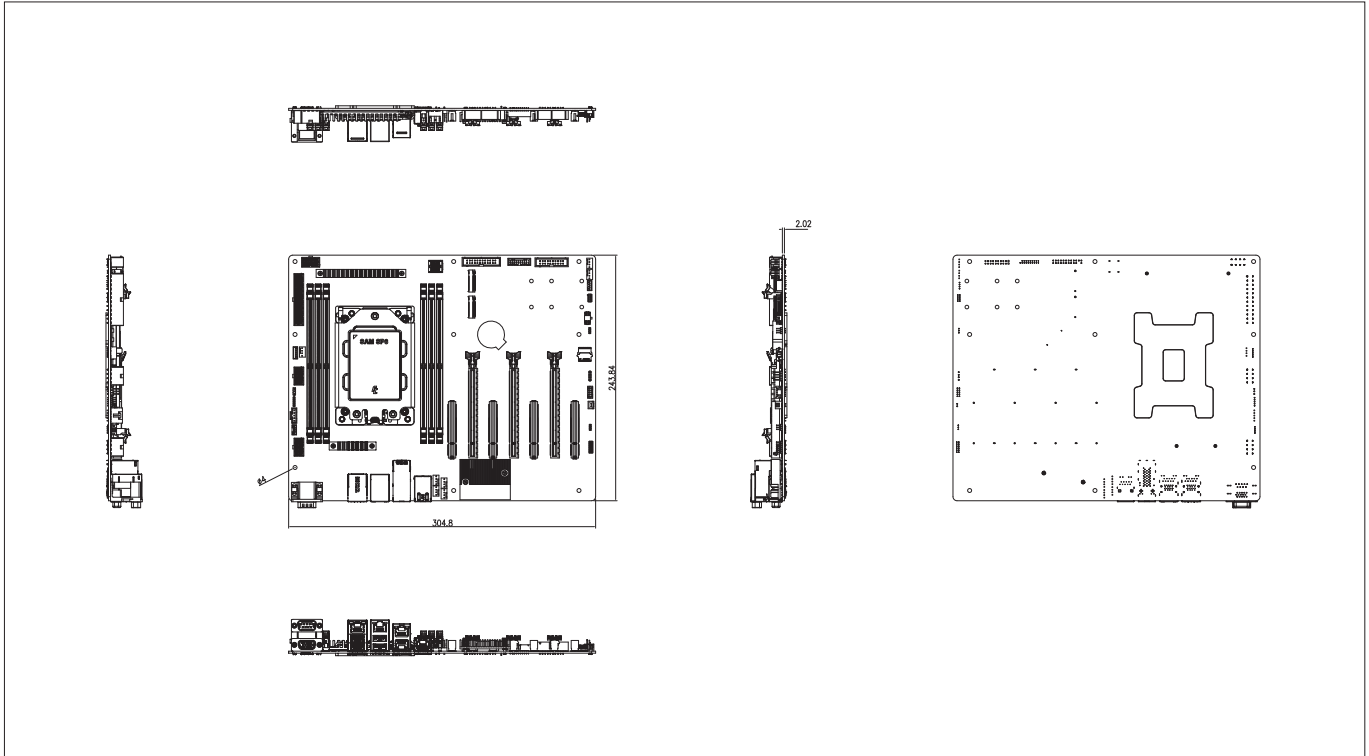
Mechanical & Environmental

Operating Temp.	0 ~ 45°C (32 ~ 113°F) to support up to 225W TDP CPU
Storage Temp.	-40 ~ 85°C
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.97KG
Power Connector	1 x Std. 24 Pin ATX connector 3 x 8 Pin SSI 12V connectors
Dimension (L x W)	12" x 9.6" (304.8mm x 243.84mm), PCB thickness is 2.0mm

Software Support

OS	Windows Server 2019 bare-metal support (KB5017379) & Hyper-V support (KB5018419) Windows Server 2022. Ubuntu 20.04 LTS & 22.04 LTS or later Red Hat Enterprise Linux (RHEL) 9.0 or later
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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-SIEUA	HPM-SIEUAA-A1R	1	NA	6	7	2/1/1	2	0/6/0	1
HPM-SIEUA	HPM-SIEUAL-A1R	1	NA	6	7	0/1/1	2	0/6/0	1

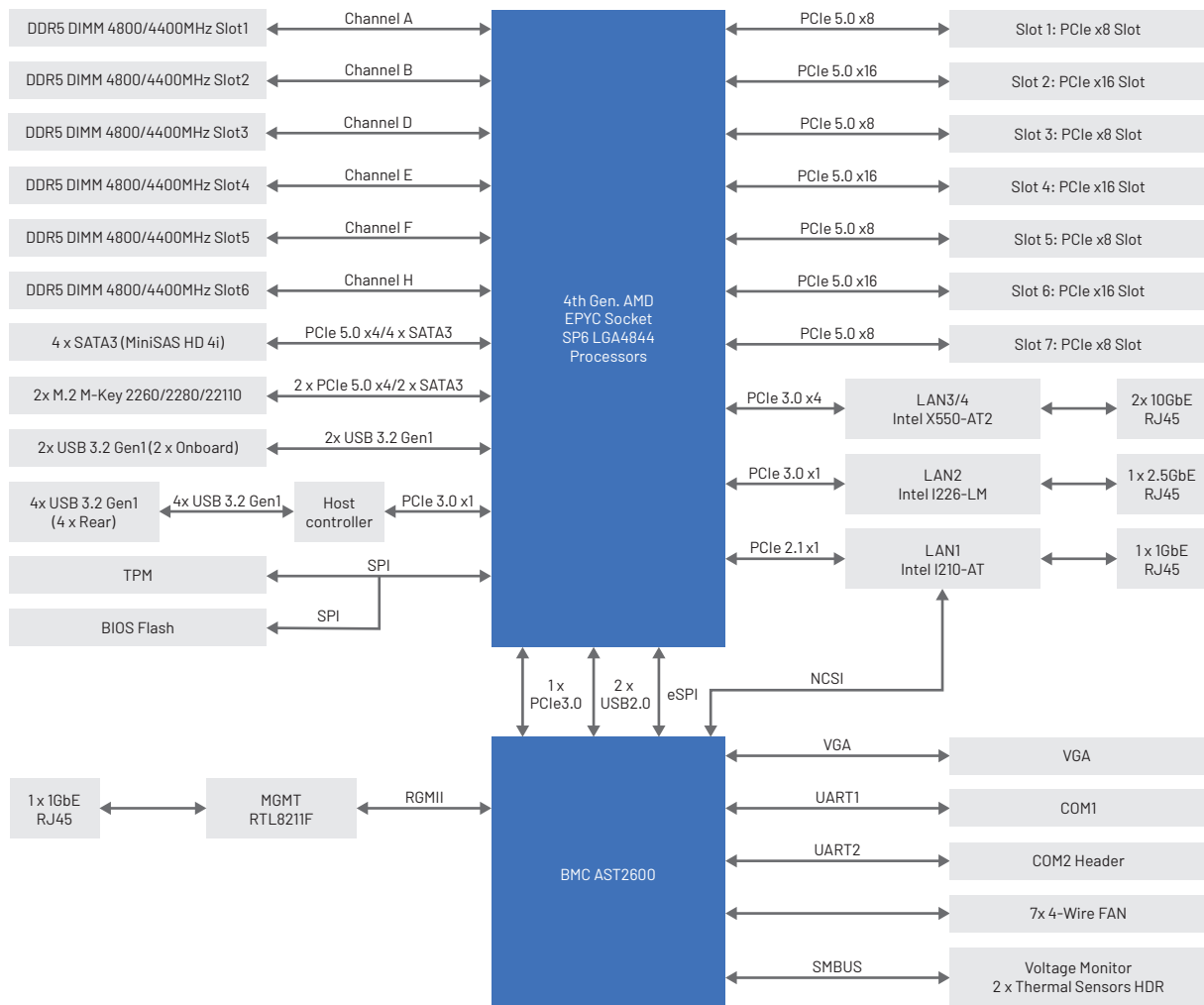
Packing List

Item	P/N	Quantity
HPM-SIEUA motherboard	HPM-SIEUAA-A1R	1
HPM-SIEUAA I/O shield	E195BKHPIEUA00R	1

CPU Support List (HPC Only)

SKU	Launch Date	# of Cores	# of Threads	Processor Base Frequency	Max Turbo Frequency	TDP (W)
AMD EPYC™ 8534P	Q3,23	64	128	2.3 GHz	3.15 GHz	200
AMD EPYC™ 8434P	Q3,23	48	96	2.5 GHz	3.15 GHz	200
AMD EPYC™ 8324P	Q3,23	32	64	2.65 GHz	3.0 GHz	180
AMD EPYC™ 8224P	Q3,23	24	48	2.55 GHz	3.0 GHz	160
AMD EPYC™ 8124P	Q3,23	16	32	2.45 GHz	3.0 GHz	125

Block Diagram



I/O Overview

