

ASMB-561

AMD® EPYC™ Embedded 8004 MicroATX Server Board with 6 x DDR5, 4 x PCIe5.0 x16, up to 4 x MCIO, 5 x USB 3.2 (Gen1), Dual 10GbE, TPM2.0, IPMI



CE FCC

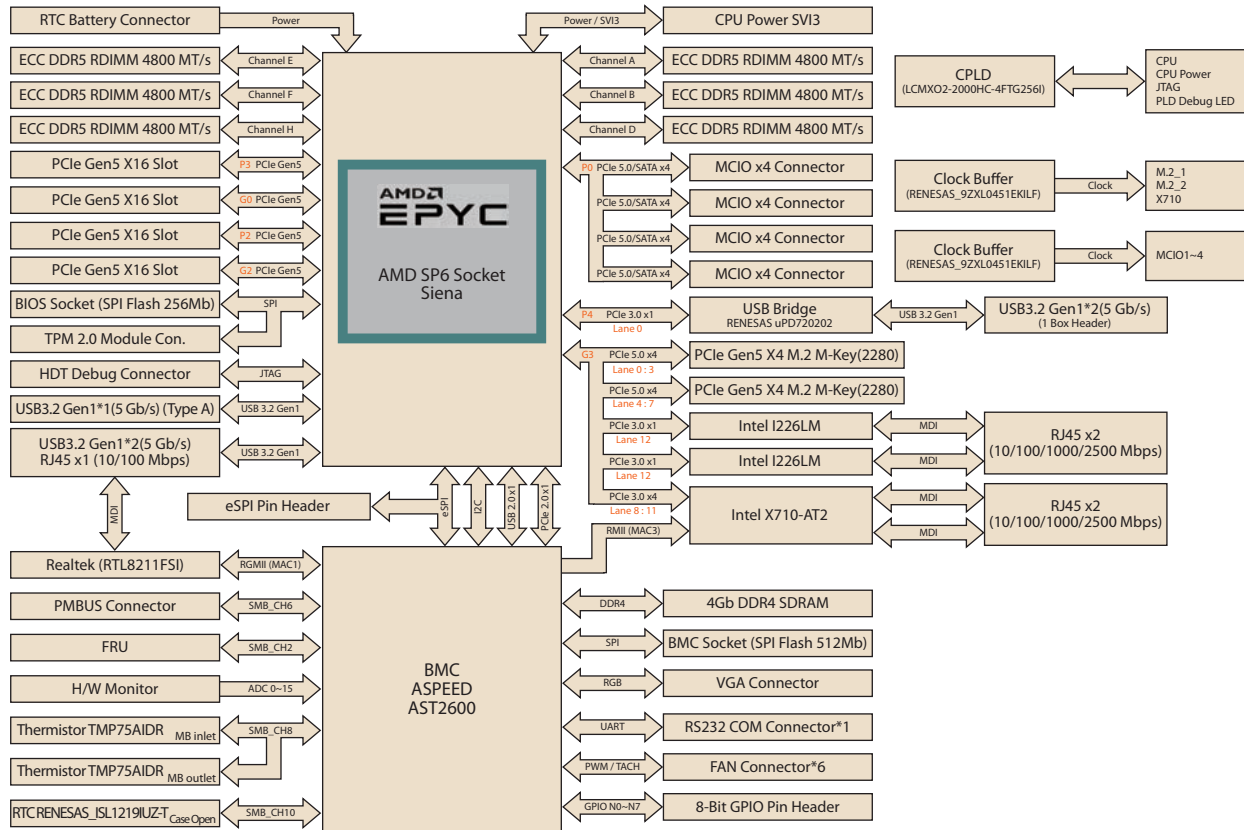
Features

- LGA 4844(Socket SP6) AMD® EPYC™ Embedded 8004 Series Server processors
- Six DDR5 4800 MHz ECC RDIMM, up to 576GB
- Four PCIe Gen5 x16 slots with CXL support on slot 4/6
- Intel® X710-AT2 dual 10GbE ports & I226 dual GbE ports
- Four MCIO interface and Five USB 3.2 (Gen1) ports
- Two M.2 2280 PCIe Gen4 x4
- TPM 2.0 on board by eSPI interface
- 0 ~ 60 °C/ 32 ~ 140 °F ambient operating temperature range

Specifications

Form Factor		MicroATX form factor
Processor System	Socket	AMD LGA 4844 (Socket SP6)
	CPU type	AMD EPYC™ Embedded 8004 processors (CPU cooler should be purchased separately*)
Memory	Total slots	6x (1 DIMM per channel)
	Capacity	Maximum 576GB ECC RDIMM
	Memory type	DDR5 ECC-REG 3600/4000/4400/4800 MHz RDIMM
	Memory size	16 GB, 32 GB, 64 GB (RDIMM)
Expansion Slots	Total PCI/PCI-X/PCIe slots	4
	Slot location 1	-
	Slot location 2	-
	Slot location 3	-
	Slot location 4	PCIe x16 slot (Gen5 x16 link), CXL support
	Slot location 5	PCIe x16 slot (Gen5 x16 link)
	Slot location 6	PCIe x16 slot (Gen5 x16 link), CXL support**
Graphics	VGA	ASPEED AST2600
	SATA controller	AMD EPYC™ CPU integrated: Eight (via MCIO interface)
Storage	SAS controller	-
	Networking	GbE/10GbE LAN Intel® I226LM (2x GbE ports) /Intel® X710-AT2 (2x 10GbE ports)
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12V power connector
	USB connector	2 x USB 3.2 Gen1 ports (one onboard header) + 1 x Type-A USB 3.2 Gen1 port
	Fan header	6 x 4-pin (5 for system + 1 for CPU)
	M.2	2 x M.2 2280 (PCIe Gen4)
	SMBus	1
	chassis intrusion	1
	Front LAN LED	1
	MCIO connector	4 (2 ports for SATA3, 2 ports for PCIe5.0)
	PS/2 KB/Mouse header	-
	Serial port header	-
Rear I/O Connector	External serial port	1
	External USB port	2 (USB 3.2 Gen1)
	VGA port	1
	RJ-45	5 (1 port dedicated LAN and 1 port shared LAN for IPMI function)
	PS/2 Keyboard/Mouse	-
Management Solution	Infiniband	-
	Software	-
Monitoring	Out of band remote management	Yes
	CPU temperature	Yes
Watchdog Timer	System Monitoring	Yes
	Output	System reset
Power Requirement	Interval	Programmable 1 ~ 255 sec/min
	Power On (200W CPU @2.3GHz DDR5-4800 32G*6)	+V3.3 +V5 +V12 +V5_SB +V12_8P_0 +V12_8P_0
Environment	Operating	0.88 2.97 0.38 0.04 13.72 7.03
	Non-operating	
	Temperature	0 ~ 60 °C/32 ~ 140 °F (CPU TDP under 200W) Also depends on CPU cooling solution
Physical Characteristics	Humidity	-40 ~ 85 °C/-40 ~ 185 °F
	Dimension (L x H)	10% ~ 95% (Non condensing)
		244 x 244 mm (9.6 x 9.6 in)

Block Diagram



Ordering Information

Part Number	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-561T2-00A1	6 x DDR5 ECC-REG DIMM	2/2	Yes	AST2600
ASMB-561I-00A1	6 x DDR5 ECC-REG DIMM	2/0	Yes	AST2600

Packing List

Part Number	Description	Quantity
TBD	Startup manual	x 1
TBD	SATA data cables	x 1
TBD	SATA power cables	x 1
TBD	CPU power cable	x 2
TBD	Screw for M.2 device	x 2
TBD	I/O Shield	x 1
TBD	PCIe I/O support	x 1
TBD	Front panel convert cable	x 1

Optional Accessories

Part Number	Description
1970005926N011	2U AMD Siena 200WCPU Cooler
TBD	

I/O View



ASMB-561T2-00A1



ASMB-561I-00A1