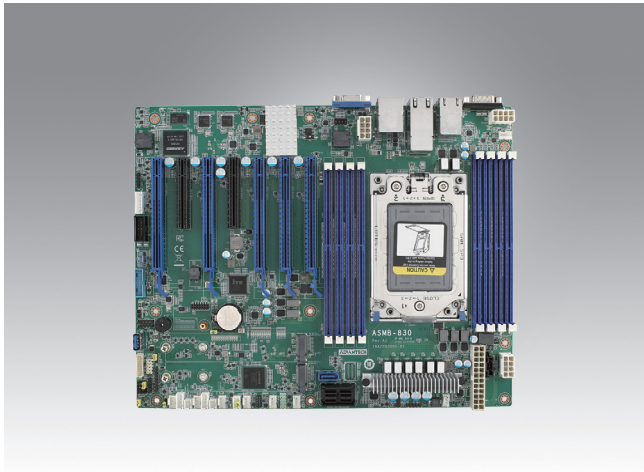


# ASMB-830

**LGA 4094 AMD® EPYC™ 7003 ATX Server Board with 8x DDR4, 5x PCIe 4.0 x16 + 2x PCIe 4.0 x8, 9x SATA 3, 5x USB 3.0, Dual 10GbE, and IPMI**



CE FCC

## Features

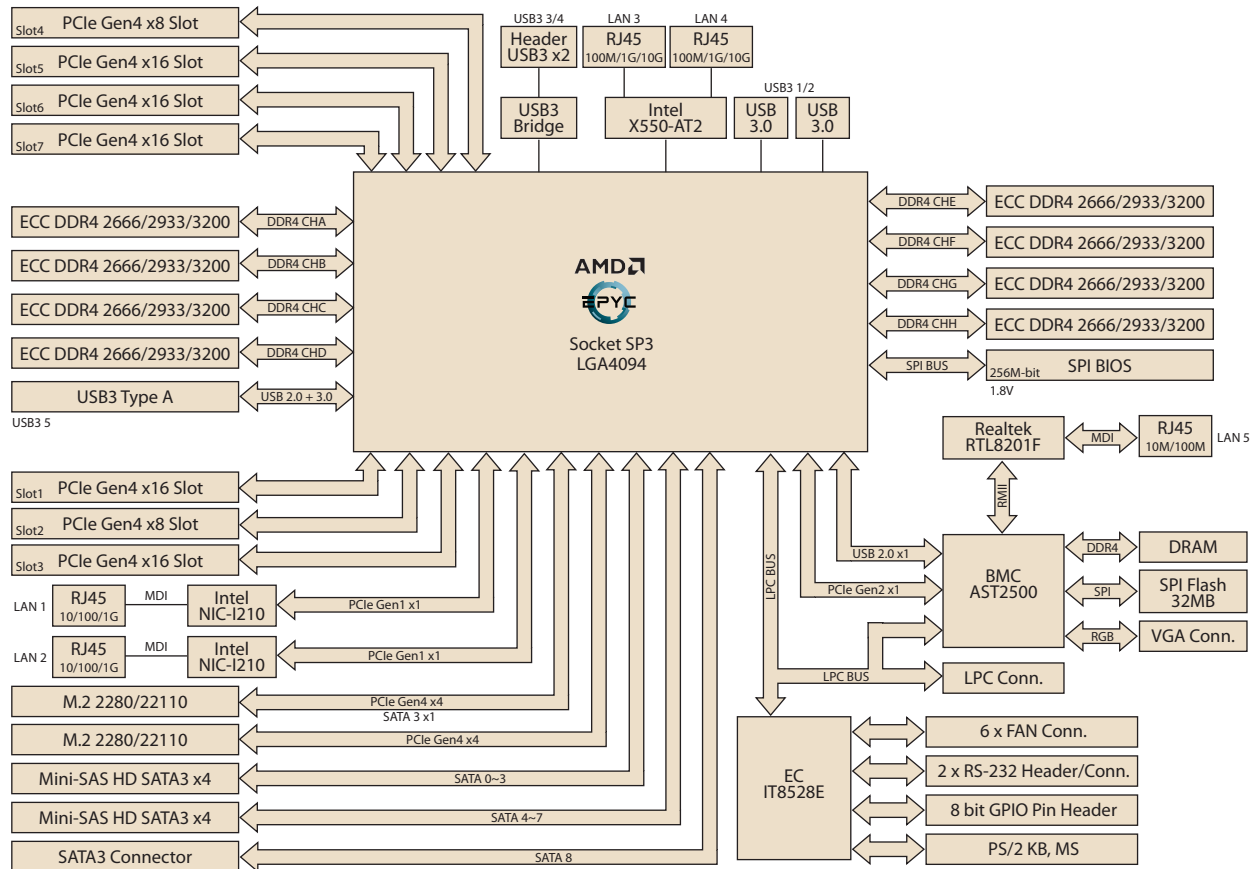
- LGA 4094 (Socket SP3) ATX server board with AMD EPYC™ 7003 processor
- DDR4 3200 MHz RDIMM up to 128GB per DIMM
- Features 5x PCIe 4.0 x16, 2x PCIe 4.0 x8
- Intel® X550 dual 10GbE ports
- Eight (via SFF-8643 connector) + one SATA 3 and two M.2 connectors (SATA/PCIe 4.0 compatible)
- 0 ~ 60 °C/ 32 ~ 140 °F ambient operating temperature range

## Specifications

Form Factor	ATX form factor						
Processor System	Socket	AMD LGA 4094 (Socket SP3)					
	CPU type	AMD EPYC™ 7003 processors (CPU cooler should be purchased separately*)					
Memory	Total slots	8x (1 DIMM per channel)					
	Capacity	Maximum 128GB ECC-REG per DIMM					
	Memory type	DDR4 ECC-REG 2666/2933/3200 MHz RDIMM/LRDIMM					
	Memory size	8 GB, 16 GB, 32 GB, 64 GB, 128GB (LRDIMM)					
Expansion Slots	Total PCI/PCI-X/PCIe slots	7					
	Slot location 1	PCIe x16 slot (Gen4 x16 link)					
	Slot location 2	PCIe x8 slot (Gen4 x8 link)					
	Slot location 3	PCIe x16 slot (Gen4 x16 link)					
	Slot location 4	PCIe x8 slot (Gen4 x8 link)					
	Slot location 5	PCIe x16 slot (Gen4 x16 link)					
	Slot location 6	PCIe x16 slot (Gen4 x16 link)					
Graphics	VGA	ASPEED AST2500					
	SATA controller	AMD EPYC™ CPU integrated: Eight (via Mini-SAS HD SFF-8643) + one SATA3					
Storage	SAS controller	-					
	Networking	GbE/10GbE LAN					
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector					
	USB connector	4 x USB 3.0 ports (two onboard headers) + 1 x Type-A USB 3.0 port					
	Fan header	6 x 4-pin (5 for system + 1 for CPU)					
	M.2	1 x M.2 2280/22110 (PCIe Gen4 / SATA) + 1 x M.2 2280/22110 (PCIe Gen4 only)					
	SMBus	1					
	Chassis intruder	1					
	Front LAN LED	1					
	PS/2 KB/Mouse header	1					
	Serial port header	1					
	Rear I/O Connector	External serial port	1				
		External USB port	2x (USB 3.0)				
VGA port		1					
RJ-45		5x (1 port dedicated for IPMI function)					
Management Solution	Software	-					
	Out of band remote management	Yes					
Monitoring	CPU temperature	Yes					
	System Monitoring	Yes					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 ~ 255 sec/min					
Power Requirement	Power On	3.3V	5V	12V	5Vsb	12V_8P_0	12V_8P_1
	(225W CPU@2.0GHz DDR4-2666 32G*8)	1.782A	1.704A	1.379A	0.142A	16.978A	8.227A
Environment	Temperature	Operating			Non-operating		
		0 ~ 60 °C/32 ~ 140 °F, depends on CPU speed and cooling solution			-40 ~ 85 °C/-40 ~ 185 °F		
	Humidity	10% ~ 95%			10% ~ 95% (Non condensing)		
Physical Characteristics	Dimension (L x H)	304 x 244 mm (12 x 9.6 in)					

\*CPU power design support up to 225W TDP. Please consider extended air thermal solution while using CPU > 180W TDP

### Block Diagram



### Ordering Information

Part Number	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-830I-00A1	DDR4 ECC-REG DIMM	2/-	Yes	AST 2500
ASMB-830T2-00A1	DDR4 ECC-REG DIMM	2/2	Yes	AST 2500

### Packing List

Part Number	Description	Quantity
2042083000	Startup manual	x 1
1700003194	SATA data cables	x 1
1700022749-11	SATA power cables	x 1
1700019748	CPU power cable	x 2
1930005673-11	Screw for M.2 device	x 2
1960093947T002	I/O Shield	x 1
1700031926-11	Front panel convert cable	x 1

### Optional Accessories

Part Number	Description
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1970004815N001	LGA 4094 CPU cooler for 1U chassis (180W)
1970004817N001	LGA 4094 CPU cooler for 2U/4U chassis (225W)
1700028292-01	Dual port USB 3.0 cable (30 cm/11.8 in) with bracket
1701090401	COM port cable (40 cm/15.7 in) with bracket
1700019268-11	PS/2 port cable (35 cm/13.77 in)
1960063434N000	Cable bracket for 1700019268-11
1960106191N001	For 1U chassis I/O shield

Note:  
1. Select SATA cable (SFF-8643) from HPC chassis datasheet or contact sales representative.

### I/O View



ASMB-830I-00A1



ASMB-830T2-00A1