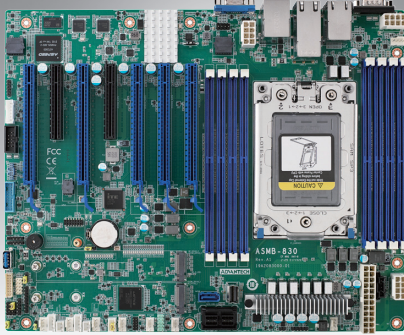


# ASMB-830

**OLGA 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**

Preliminary



## Features

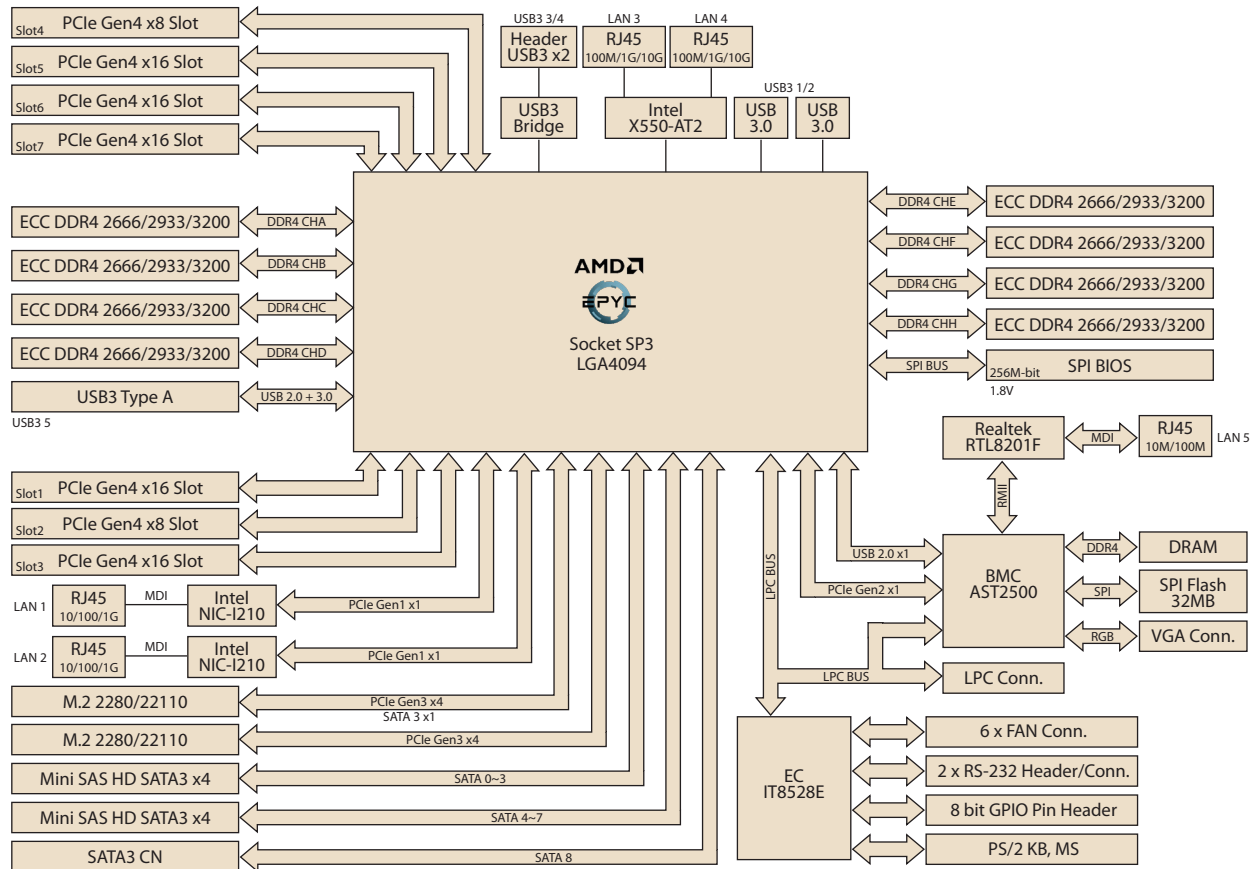
- OLGA 4094 (Socket SP3) ATX server board with AMD EPYC 7003 processor
- DDR4 3200 MHz RDIMM up to 256GB per DIMM
- Features 5x PCIe 4.0 x16, 2x PCIe 4.0 x8
- Intel® X550 dual 10GbE ports
- Eight (via SFF-8643 connector) + one SATA 3 and two M.2 connectors (SATA/PCIe compatible)
- 0 ~ 60 °C/ 32 ~ 140 °F ambient operating temperature range

## Specifications

Form Factor		ATX form factor			
Processor System	Socket	AMD OLGA 4094 (Socket SP3)			
	CPU type	AMD Zen EPYC 7003 processors (CPU cooler should be purchased separately*)			
Memory	Total slots	8x (1 DIMM per channel)			
	Capacity	Maximum 256GB ECC-REG DIMM per slot			
	Memory type	DDR4 ECC-REG 2666/2933/3200 MHz RDIMM/LRDIMM			
	Memory size	8 GB, 16 GB, 32 GB, 64 GB, 128GB, 256GB (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 AST 2500			
	Storage	SATA controller	AMD Integrated IO Die		
Networking	SAS controller	-			
	GbE/10GbE LAN	2 x Intel® I210AT / Intel® X550-AT2 (dual 10GbE ports)			
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V power connector + 4-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 / SATA) + 1 x M.2 2280/22110 (PCIe only)			
	SMBus	1			
	Chassis intruder	1			
	Front LAN LED	1			
	PS/2 KB/Mouse header	1			
Rear I/O Connector	Serial port header	1			
	External serial port	1			
	External USB port	2x (USB 3.0)			
	VGA port	1			
Management Solution	RJ-45	5x (1 port dedicated for IPMI function)			
	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	3.3V	5V	12V	5Vsb -12V 12V_8P
Environment	Operating	0 ~ 60 °C/32 ~ 140 °F, depends on CPU speed and cooling solution			Non-operating
	Temperature				-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 230W 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 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 2

### Optional Accessories

Part Number	Description
PCA-AUDIO-HDB1E	HD Audio card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1970004817N001	OLGA 4094 CPU cooler for 2U/4U chassis (225W)
1700002204	Dual port USB cable (27 cm/10.6 in) with bracket
1700008461	Four port USB cable (30.5 cm/12 in) with bracket
1700020277-01	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
TBD	For 1U chassis I/O shield

### I/O View



ASMB-830I-00A1



ASMB-830T2-00A1