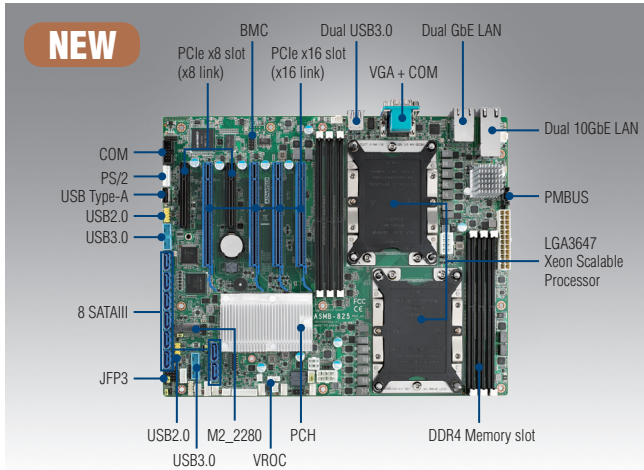


# ASMB-825

**Dual LGA 3647-P0 Intel® Xeon® Scalable ATX Server Board with 6 DDR4, 4 PCIe x16 + 2 PCIe x8, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI**



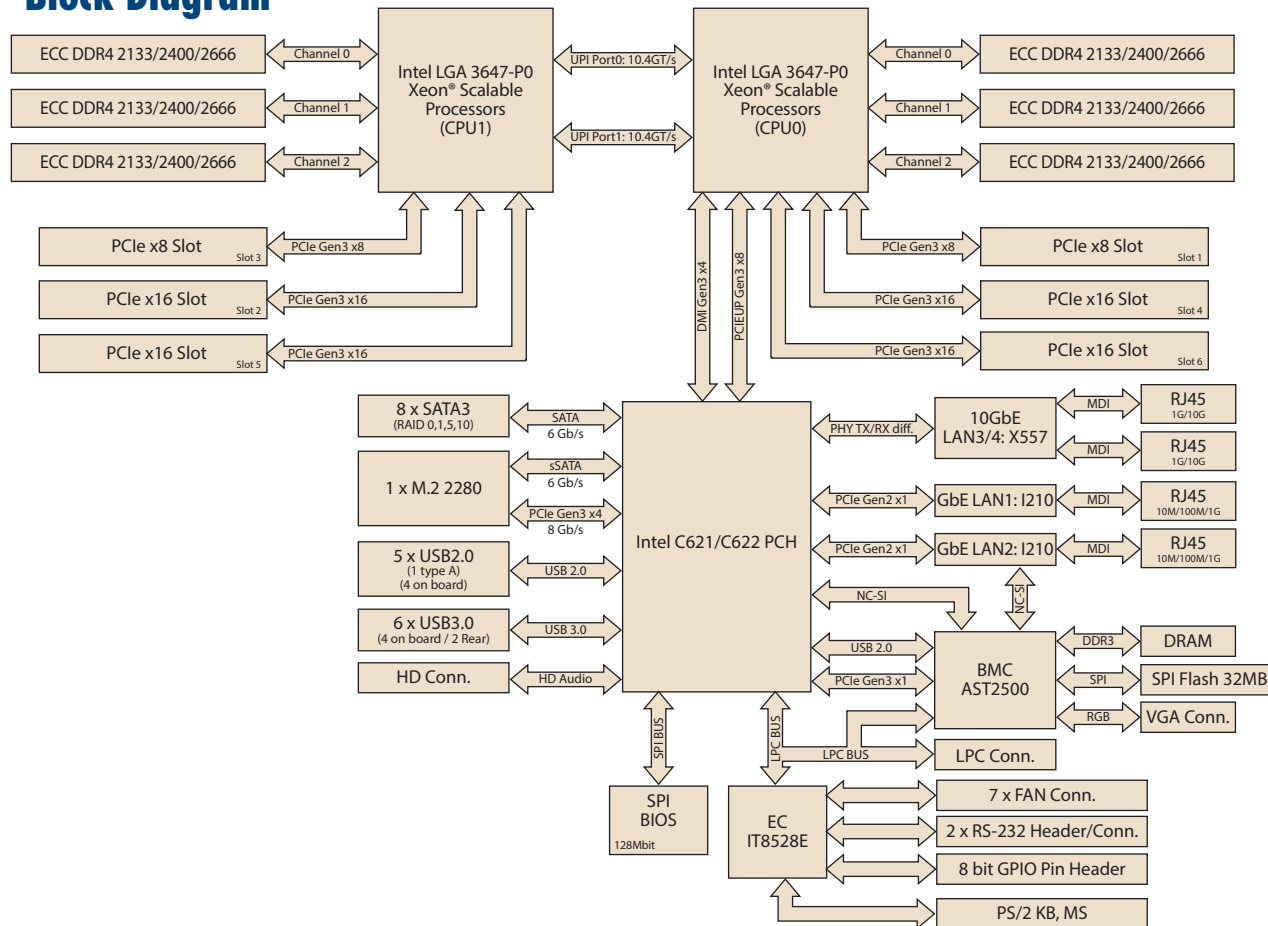
## Features

- ATX server board with dual Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 384 GB (6 LRDIMMs), support Apache Pass
- Four PCIe x16 slots (Gen3) and two PCIe x8 (Gen3)
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range

## Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 3647-P0
	CPU type	Intel Xeon 1st and 2nd Gen Scalable dual processors (CPU cooler should be purchased separately and TDP up to 150W)
Core Logic	Chipset	Intel C621/C622 chipset
Memory	Total slots	6 (1 DIMM per channel)
	Capacity	Maximum 384GB ECC LRDIMM Maximum 192GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)
Expansion Slots	Total PCI/PCI-X/PCIe slots	6
	Slot location 1	PCIe x8 slot (x8 link), signal from CPU0
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 3	PCIe x8 slot (x8 link), signal from CPU1
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU0
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU1
Slot location 6	PCIe x16 slot (x16 link), signal from CPU0	
Graphics	VGA	Aspeed AST 2500/2510
Storage	SATA controller	Intel C621/C622: 8 x SATA3 (600 MB/s) support software RAID 0,1,5,10
	SAS controller	-
Networking	GbE/10GbE LAN	2 x Intel I210AT / Intel X557-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 USB2.0 ports (two onboard headers) + 4 x USB3.0 ports (two onboard headers) + 1 x Type-A USB2.0 port
	Fan header	7 x 4-pin (5 for system + 2 for CPU)
	M.2	1 x M.2 2280 B+M key (SATA and PCIe)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	1
	Audio Header	1
	PS/2 KB/Mouse	1
	Serial port header	1
Rear I/O Connector	External serial port	1
	External USB port	2 (USB3.0)
	VGA port	1
	RJ-45	4 (LAN2 sharing with IPMI function)
	PS/2 KB/mouse	-
	Infiniband	-
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-825I & ASMB-825T2 SKUs)
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      12V_8P_0      12V_8P_1
	(150W CPU@2.6GHz DDR4 2400 8G*6)	1.32966A      4.31024A      0.68597A      0.25408A      0.056846A      21.5989A      17.5921A
Environment	Operating	Non-operating
	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution      -40 ~ 85 °C
	Humidity	10 ~ 95%
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")

### Block Diagram



### Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-825-00A1E	C621	DDR4 RDIMM	2/-	-	AST 2510
ASMB-825I-00A1E	C621	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-825T2-00A1E	C622	DDR4 RDIMM	2/2	Yes	AST 2500

### Packing List

Part Number	Description	Quantity
2066825I00	Driver CD	x 1
2006825I10	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
1960076489T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 2

### Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960081155N001	LGA-3647 narrow CPU heatsink for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
1701090401	COM port cable (40 cm) with bracket
1700019268-11	PS/2 port cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
1960082348N000	1U chassis IO shield

### I/O View



ASMB-825T2-00A1E



ASMB-825-00A1E  
ASMB-825I-00A1E