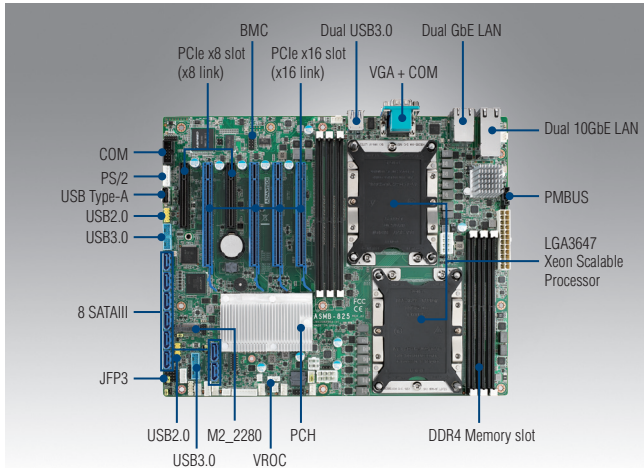


ASMB-825

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

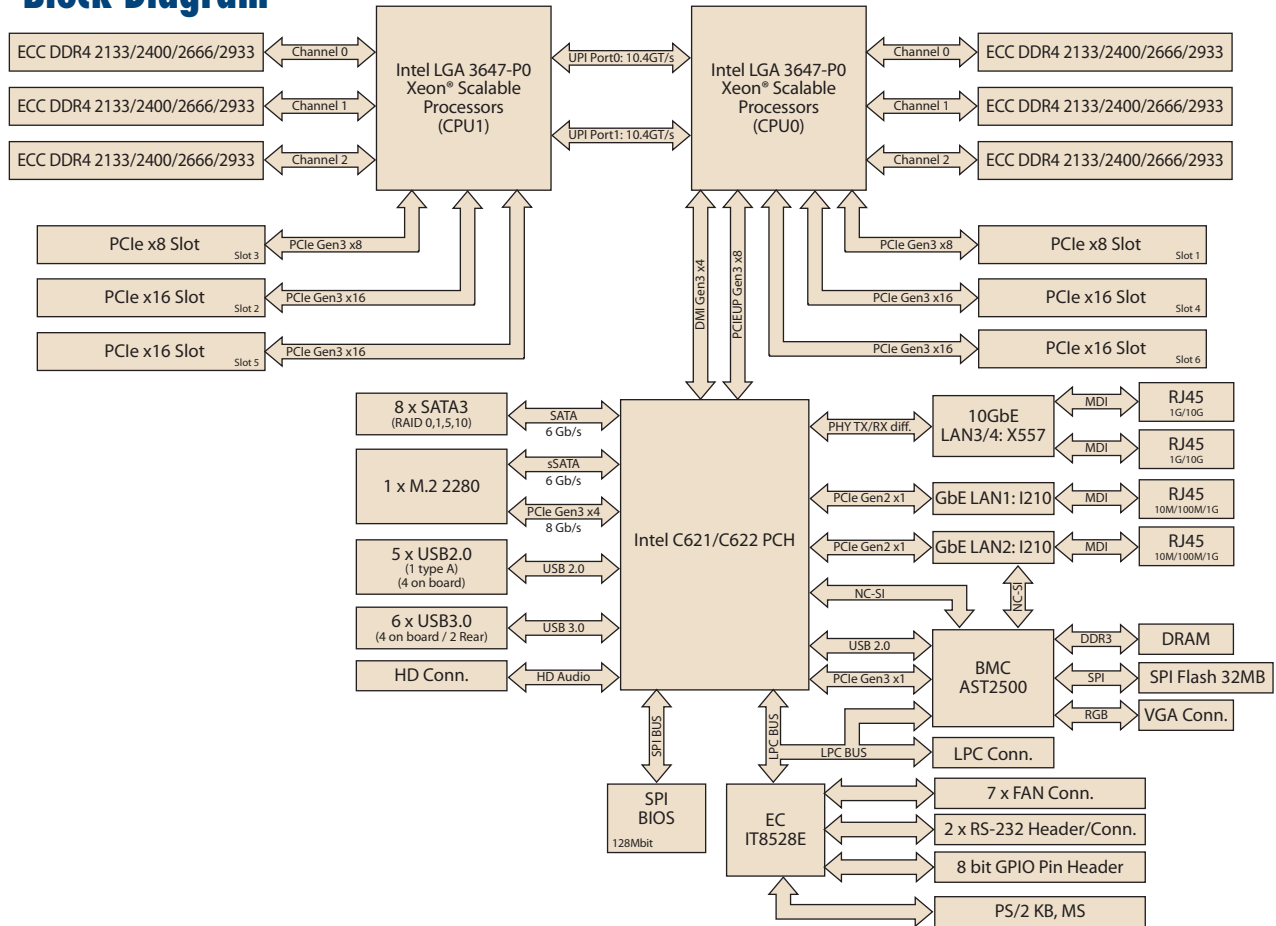
- ATX server board with dual Xeon® Scalable processors
- DDR4 2933 MHz RDIMM up to 768GB, support Apache Pass
- Four PCIe x16 slots (Gen3) and two PCIe x8 (Gen3)
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range



Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 3647
	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
	Total slots	6 (1 DIMM per channel)
Memory	Capacity	Maximum 768GB ECC LRDIMM
		Maximum 768GB ECC 3DS RDIMM
		Maximum 1TB Intel Optane DC Persistent Memory in memory mode
	Memory type	DDR4 2133/2400/2666/2933MHz RDIMM, LRDIMM
	Memory size	4GB, 8GB, 16GB, 32GB, 64GB, 128GB
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
Graphics	VGA	Aspeed AST 2500/2510
	SATA controller	Intel C621/C622: 8 x SATA3 (600 MB/s) support software RAID 0,1,5,10
Storage	SAS controller	-
	Networking	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 Keyboard/Mouse header	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 and LAN4 shared with BMC)
	PS/2 Keyboard/Mouse	-
Management Solution	Infiniband	-
	Software	-
Monitoring	Out of band remote management	Yes (ASMB-825I & ASMB-825T2)
	CPU temperature	Yes
Watchdog Timer	System Monitoring	Yes
	Output	System reset
Power Requirement	Interval	Programmable 1 ~ 255 sec/min
	Power On (150W CPU@2.6GHz DDR4 2400 8G*6)	3.3V 5V 12V 5Vsb -12V 12V_8P_0 12V_8P_1
Environment		1.32966A 4.31024A 0.68597A 0.25408A 0.056846A 21.5989A 17.5921A
	Temperature	Operating: 0 ~ 40 °C, depends on CPU speed and cooler solution Non-operating: -40 ~ 85 °C
Physical Characteristics	Humidity	10 ~ 95%
	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	6 x DDR4 RDIMM/LRDIMM	2/-	-	AST 2510
ASMB-825I-00A1E	C621	6 x DDR4 RDIMM/LRDIMM	2/-	Yes	AST 2500
ASMB-825T2-00A1E	C622	6 x DDR4 RDIMM/LRDIMM	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-HDB1E	HD audio card
PCA-TPM-00B1E	TPM 2.0 module
1960081155N001	LGA-3647 narrow CPU heatsink for 1U chassis (85W)
1960088272T001	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

Note: PCA-AUDIO-HDB1E is not compatible with Advantech 3U chassis.

I/O View



ASMB-825T2-00A1E



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