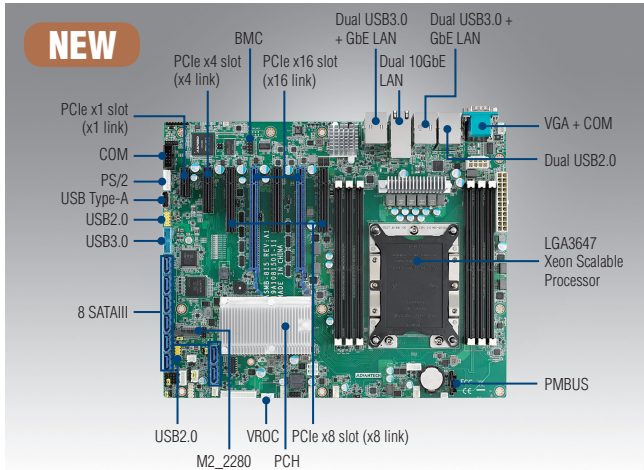


ASMB-815

LGA 3647-PO Intel® Xeon® Scalable ATX Server Board with 6 DDR4, 5 PCIe x8 or 2 PCIe x16 and 1 PCIe x8, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI



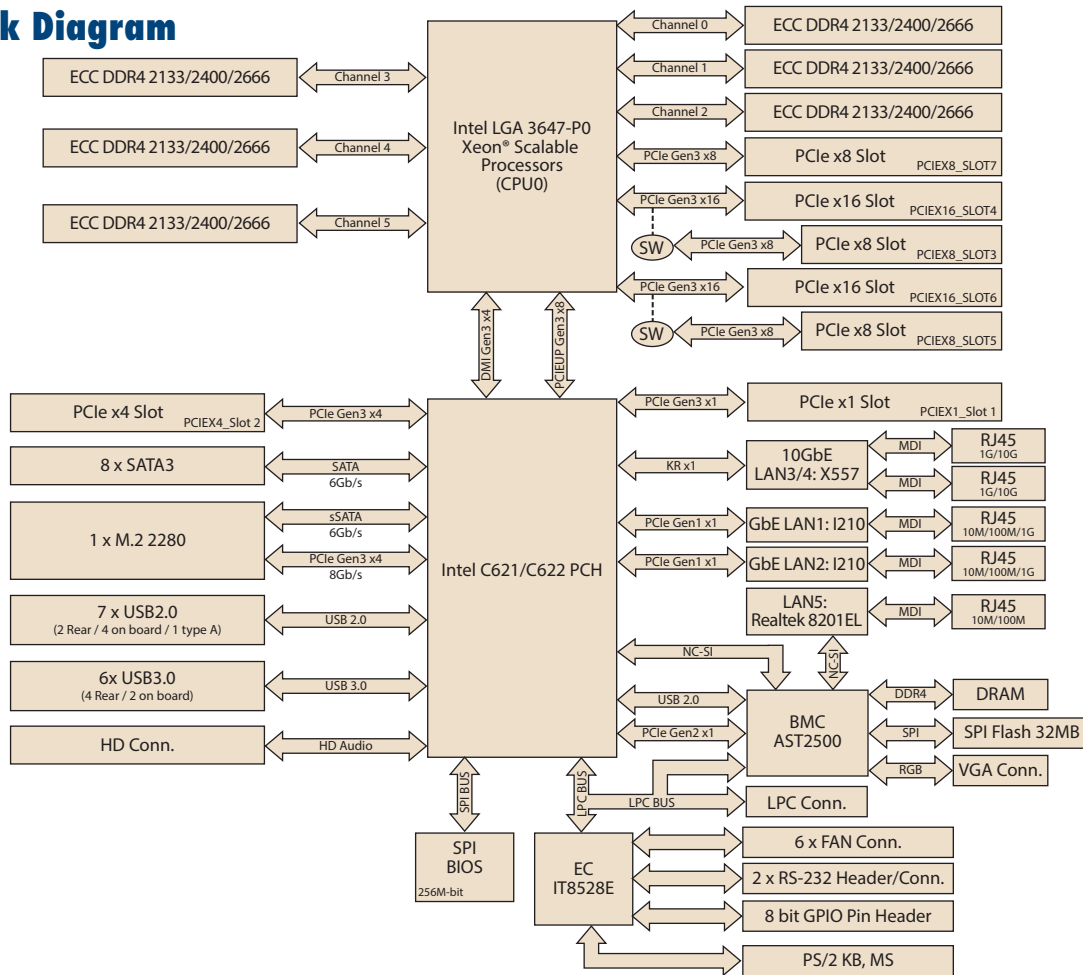
Features

- ATX server board with Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 384 GB (6 LRDIMMs), support Apache Pass
- Five PCIe x8 or two PCIe x16 and 1 PCIe x8
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 60 °C ambient operating temperature range

Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 3647-PO
	CPU type	Intel Xeon Scalable processors (CPU cooler should be purchased separately and TDP up to 205W)
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	7
	Slot location 1	PCIe x1 slot (x1 link), signal from PCH
	Slot location 2	PCIe x4 slot (x4 link), signal from PCH
	Slot location 3	PCIe x8 slot (0 or x8 link), signal from CPU
	Slot location 4	PCIe x16 slot (x8 or x16 link), signal from CPU
	Slot location 5	PCIe x8 slot (0 or x8 link), signal from CPU
	Slot location 6	PCIe x16 slot (x8 or x16 link), signal from CPU
Slot location 7	PCIe x8 slot (x8 link), signal from CPU	
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 + 1 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) + 2 x USB3.0 ports (one onboard header) + 1 x Type-A USB2.0 port
	Fan header	6 x 4-pin (5 for system + 1 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
Rear I/O Connector	PS/2 KB/Mouse	1
	Serial port header	1
	External serial port	1
	External USB port	4 (USB3.0) + 2 USB (2.0)
	VGA port	1
	RJ-45	5 (1 port dedicated for IPMI function)
Management Solution	PS/2 KB/mouse	-
	Infiniband	-
Monitoring	Software	-
	Out of band remote management	Yes (ASMB-8151 & ASMB-815T2 SKUs)
Watchdog Timer	CPU temperature	Yes
	System Monitoring	Yes
Power Requirement	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Environment	Power On	3.3V 5V 12V 5Vsb -12V 12V_8P
	(205W CPU@2.5GHz DDR4 2400 4G*6)	2.77127A 7.00549A 0.57829A 0.132880A 0.063951A 17.5801A
Physical Characteristics	Operating	Non-operating
	Temperature	0 ~ 60 °C, depends on CPU speed and cooler solution -40 ~ 85 °C
	Humidity	10% ~ 95% 10% ~ 95% (Non condensing)
	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-815-00A1E	C621	DDR4 RDIMM	2/-	-	AST 2510
ASMB-815I-00A1E	C621	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-815T2-00A1E	C622	DDR4 RDIMM	2/2	Yes	AST 2500

Packing List

Part Number	Description	Quantity
2066815I00	Driver CD	x 1
2006815I10	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
1960076488T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 1

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 cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1960081603N101	LGA-3647 narrow CPU cooler for 4U chassis (205W)
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
1960082347T000	For 1U chassis IO shield

I/O View



ASMB-815T2-00A1E



ASMB-815I-00A1E



ASMB-815-00A1E