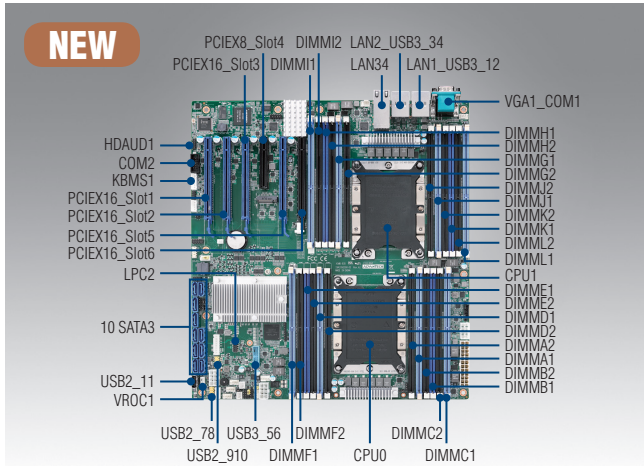


# ASMB-935

**Dual LGA3647-PO Intel® Xeon® Scalable EATX Server Board with 24 DDR4, 5 PCIe x16 + 1 PCIe x8, 10 SATA3, 6 USB3.0, Dual 10GbE, IPMI**



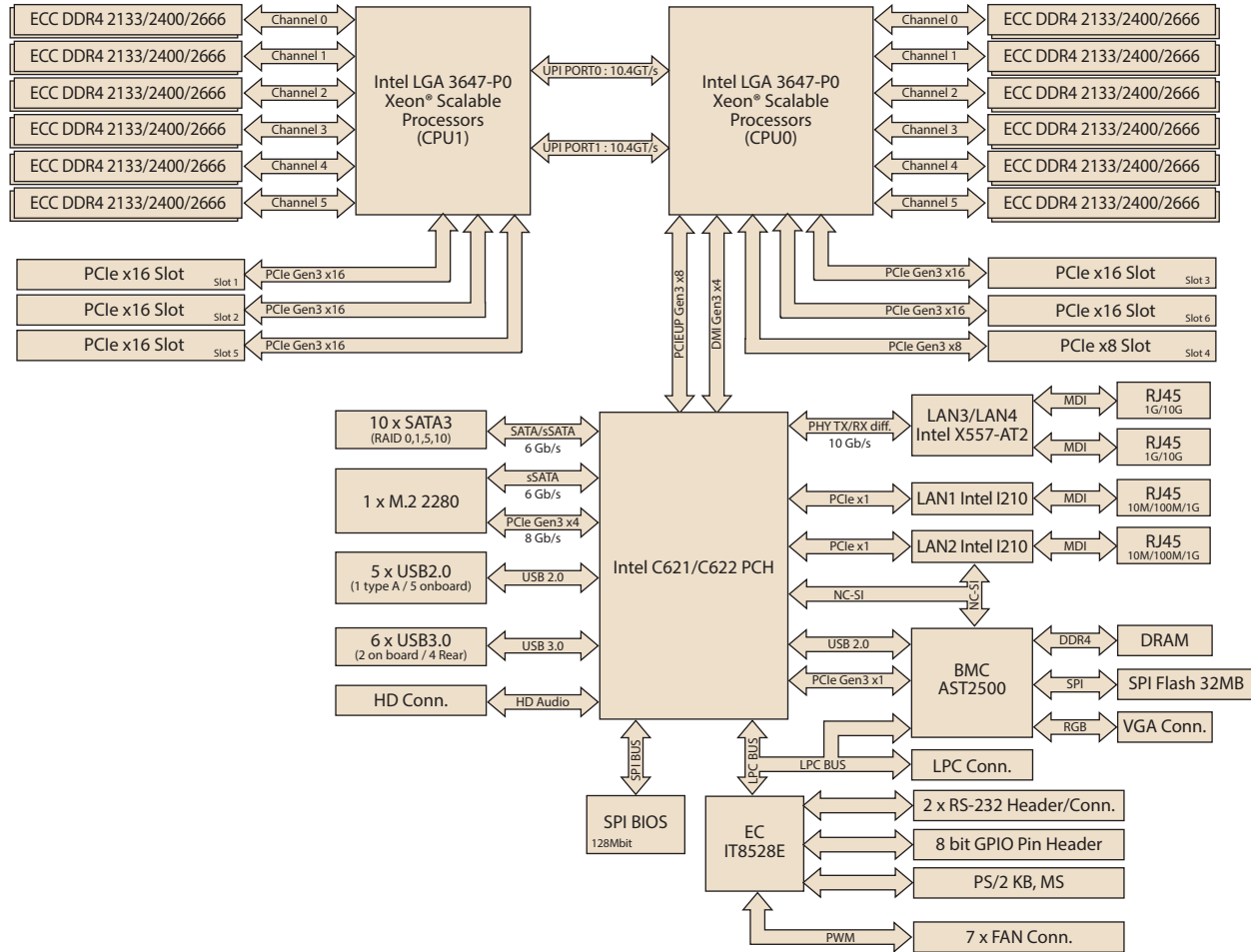
## Features

- EATX server board with dual Xeon Scalable processors
- DDR4 2666 MHz RDIMM up to 1.5 TB (24 LDIMMs), support Apache Pass
- Five PCIe x16 (Gen3) and one PCIe x8 (Gen3) for three double-deck cards
- Intel® X557-AT2 dual 10GbE ports
- Ten SATA3 and six USB3.0 ports
- One M.2 2280 (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range

## Specifications

Form Factor	EATX form factor	
Processor System	Socket	Intel LGA3647-PO
	CPU type	Intel Xeon 1st and 2nd Gen Scalable dual processors (CPU cooler should be purchased separately and TDP up to 205W)
Core Logic	Chipset Intel C620 Series	
Memory	Total slots	24 (2 DIMM per channel)
	Capacity	Maximum 1.5 TB ECC LRDIMM Maximum 768GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass
Expansion Slots	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)
	Total PCIe slots	6
	Slot location 1	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 2	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 3	1 x PCIe x16 slot (x16 link), signal from CPU0
	Slot location 4	1 x PCIe x8 slot (x8 link), signal from CPU0
	Slot location 5	1 x PCIe x16 slot (x16 link), signal from CPU1
Graphics	Slot location 6	1 x PCIe x16 slot (x16 link), signal from CPU0
	VGA	ASPEED AST2500/2510
Storage	SATA controller	Intel C621/C622: 10 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 for ASMB-935T2 sku only)	
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector
	USB connector	4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard headers) + 1 x Type-A USB2.0 port
	Fan header	7 x 4pin (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
Rear I/O Connector	PS/2 KB/Mouse	1
	Serial port header	1
	External serial port	1
	External USB port	4 (USB3.0)
	VGA port	1
	RJ-45	4 (LAN2/4 sharing with IPMI function)
Management Solution	PS/2 KB/mouse	-
	Infiniband	-
Monitoring	Software	-
	Out of band remote management	Yes (ASMB-935I/ASMB-935T2 sku only)
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_0      12V_8P_1
	(205W CPU@2.5GHz DDR4 2400 32G*24)	6.77A      5.11A      0.04A      0.17A      0.01A      21.49A      23.19A
Physical Characteristics	Operating	Non-operating
	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95%      10% ~ 95% (Non condensing)
	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")

## Block Diagram



## Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-935-00A1	C621	24 x DDR4 RDIMM	2/-	-	AST2510
ASMB-9351-00A1	C621	24 x DDR4 RDIMM	2/-	Yes	AST2500
ASMB-935T2-00A1	C622	24 x DDR4 RDIMM	2/2	Yes	AST2500

## Packing List

Part Number	Description	Quantity
2061093500	Driver CD	x 1
2001093500	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 2

## Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM2.0 Module
1960081155N001	LGA-3647 narrow CPU heatsink 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)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1700028024-01	Dual port USB 3.0 cable (45 cm) with bracket
1701090401	COM port cable with bracket
1960082347T000	For 1U chassis IO shield

## I/O View



ASMB-935T2-00A1



ASMB-935-00A1  
ASMB-9351-00A1