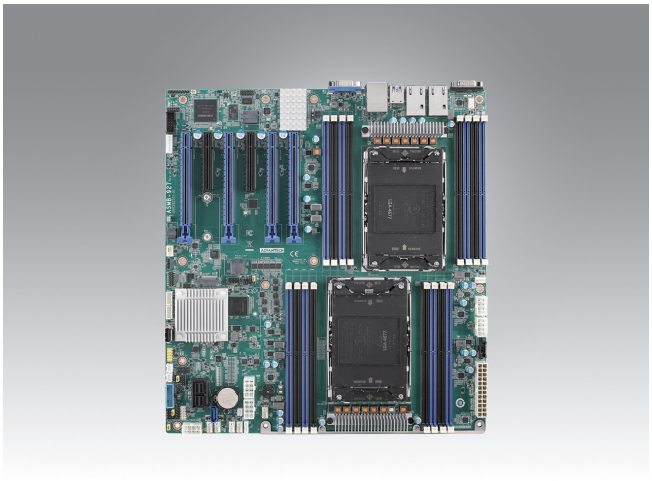
ASMB-927

Dual 5th/4th Gen Intel® Xeon® Scalable EATX Server Board with 16x DDR5, 4x PCIe x16, 9x SATA 3, 6x USB 3.2 (Gen1), Dual 10GbE, and IPMI



CE FCC

Features

- LGA4677 EATX server board with 5th/4th Gen. Xeon® Scalable processor
- DDR5 5200 MT/s RDIMM up to 4TB (16 DIMMs)
- Features 4x PCIe x16 and 2x PCIe x8
- Intel® X710-AT2 dual 10GbE ports
- Nine SATA 3 and one M.2 connector (SATA/PCIe compatible)
- 0 ~ 40 °C (32 ~ 104 °F) ambient operating temperature range

Specifications

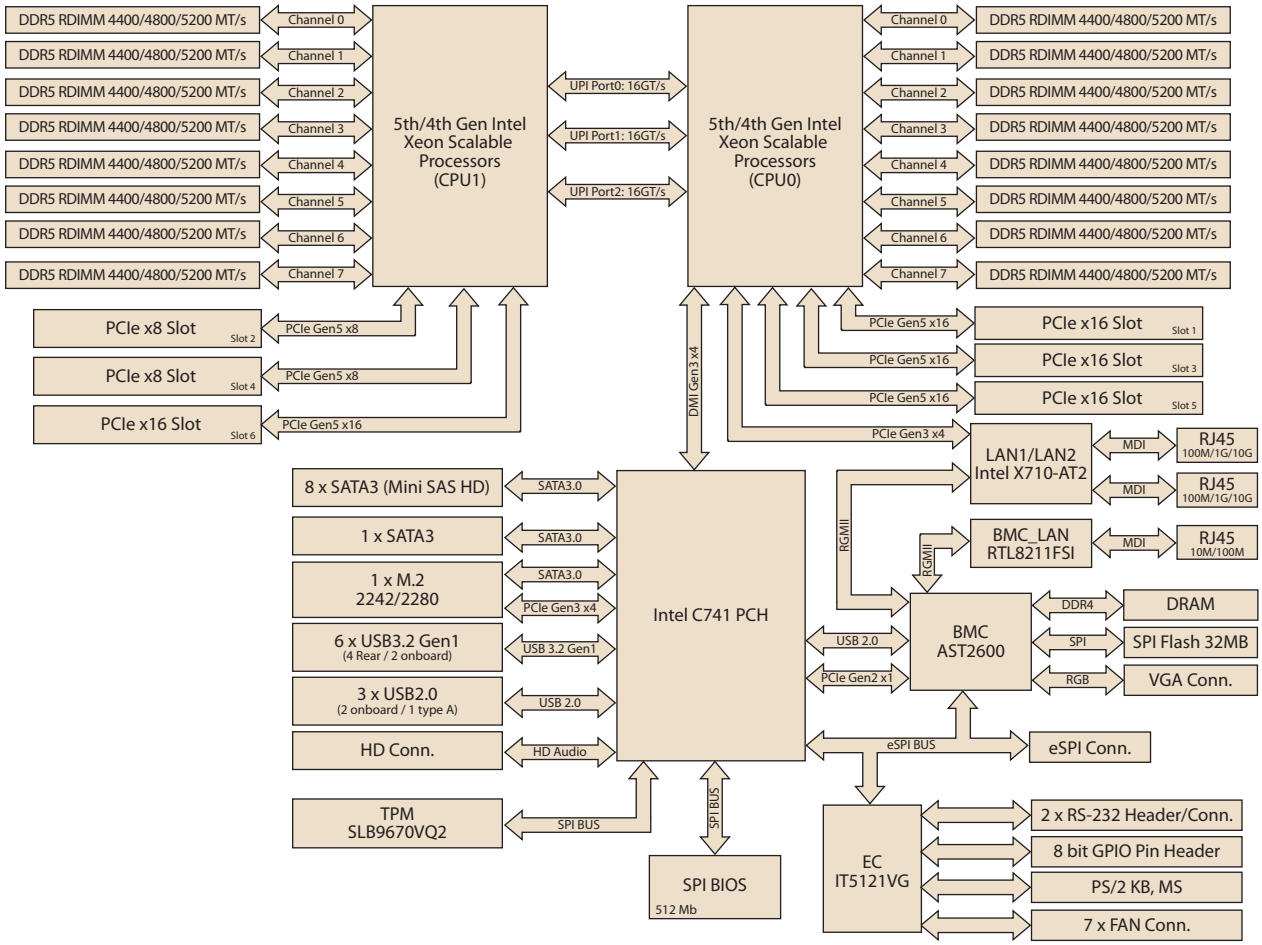
Form Factor		EATX form factor					
Processor System	Socket	Dual Intel® LGA4677 (Socket E)					
	CPU type	5th/4th Gen Intel Xeon Scalable processors (CPU cooler should be purchased separately*)					
Core Logic	Chipset	Intel C741 chipset					
Memory	Total slots	16x (1 DIMM per channel)					
	Capacity	Maximum 4TB ECC RDIMM					
	Memory type	DDR5 ECC-REG 4400/4800/5200 MT/s RDIMM					
	Memory size	16GB, 32GB, 64GB, 128GB, 256GB (The supported Memory Density are 16Gb and 24Gb)					
Expansion Slots	Total PCI/PCI-X/PCIe slots	6					
	Slot location 1	PCIe x16 slot (Gen5 x16 link), signal from CPU0, CXL support**					
	Slot location 2	PCIe x8 slot (Gen5 x8 link), signal from CPU1					
	Slot location 3	PCIe x16 slot (Gen5 x16 link), signal from CPU0, CXL support**					
	Slot location 4	PCIe x8 slot (Gen5 x8 link), signal from CPU1					
	Slot location 5	PCIe x16 slot (Gen5 x16 link), signal from CPU0, CXL support**					
	Slot location 6	PCIe x16 slot (Gen5 x16 link), signal from CPU1, CXL support**					
Graphics	VGA	Aspeed AST2600					
Storage	SATA controller	Intel® C741: 8 x SATA3.0 (6 Gb/s) via Mini SAS HD (SFF-8643), support software RAID 0,1,5,10 1 x SATA3.0 (6Gb/s)					
	SAS controller	-					
Networking	GbE/10GbE LAN	Intel® X710-AT2 (dual 10GbE ports)					
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 5 x 8-pin SSI 12 V power connector***					
	USB connector	2 x USB 2.0 ports (one onboard header) + 2 x USB 3.2 Gen1 ports (one onboard header) + 1 x Type-A USB 2.0 port					
	Fan header	7 x 4pin (5 for system + 2 for CPU)					
	M.2	1 x M.2 2242/2280 B+M key (SATA and PCIe)					
	SMBus	1					
	Chassis intrusion	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	4 (USB 3.2 Gen1)					
	VGA port	1					
	RJ-45	3 (1 port dedicated LAN and 1 port shared LAN for IPMI function)					
	PS/2 Keyboard/Mouse	-					
	Infiniband	-					
Management Solution	Software	-					
	Out of band remote management	Yes					
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
	(205W CPU@1.6GHz DDR5 4800 64G*16)	2.2A	1.9A	0.3A	0.1A	0A	38.53A
Environment		Operating				Non-operating	
	Temperature	0 ~ 40 °C/ 32 ~ 104 °F, depends on CPU speed and cooler solution				-40 ~ 85 °C/-40 ~ 185 °F	
	Humidity	10% ~ 95%				10% ~ 95% (Non condensing)	
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")					

*CPU power design support up to 250W TDP.
**CXL 1.1 Type 1 and Type 2 device.
***Please connect all 8-pin CPU PWR Conn. (ATX12V1/ ATX12V2/ ATX12V3/ ATX12V4) when using dual CPU both up to 205W TDP.

All product specifications are subject to change without notice.

Last updated: 19-Nov-2026

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-927T2-00A1	C741	16 x DDR5 RDIMM	-/2	Yes	AST2600
ASMB-927T2-00A1U	C741	16 x DDR5 RDIMM	-/2	Yes	AST2600

Packing List

Part Number	Description	Quantity
2042092700	Startup manual	x 1
1700003194	SATA data cables	x 1
1700022749-11	SATA power cables	x 1
1700019748	CPU power cable	x 2
1930008364	Screw for M.2 device	x 1
1960105615T001	I/O shield	x 1
1651003738-01	LGA4677 CPU carrier - E1A (XCC)	x 2
1651003739-01	LGA4677 CPU carrier - E1B (MCC)	x 2

Optional Accessories

Part Number	Description
PCA-AUDIO-HDB1E	HD Audio-card
1970005575T001	LGA-4677 narrow CPU heatsink for 1U chassis (185W)
1970005860N000	LGA4677 CPU cooler for 2U/4U chassis (250W/205W)
1700028025-01	Dual port USB 2.0 cable (45 cm / 17.7 in) with bracket
1700028024-01	Dual port USB 3.2 (Gen1) cable (45 cm/ 17.7 in) with bracketa
1701090401	Single port RS-232 COM cable (40 cm / 15.7 in) with bracket
1700019268-11	Cable for onboard KBMS1 connector (35 cm/ 13.7 in)
1960063434N000	Cable bracket for 1700019268-11
1960115544N001	For 1U chassis I/O shield

Note:
1. PCA-AUDIO-HDB1E is not compatible with Advantech 3U chassis.
2. Select SATA cable (SFF-8643) from HPC chassis datasheet or contact sales representative.
3. Support environment operating temperature 40°C on HPC system when using CPU TDP under 205W, operating temperature 35°C when using CPU TDP between 205W and 250W, operating temperature 30°C when using high freq. CPU SKUs 5515+/6534/4516Y+/5418N/6418H/6434H/5418Y/6426Y/6434.

I/O View



ASMB-927T2-00A1