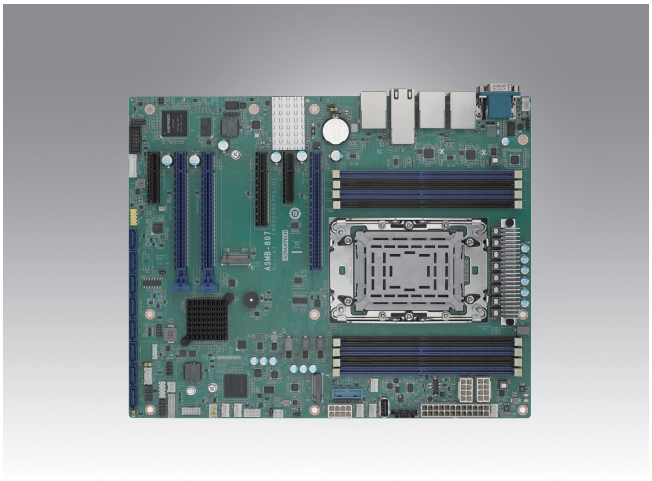
ASMB-807

Intel® Xeon® W Processors ATX Server Board with 8 x DDR5, 3 x PCIe x16, 8 x SATA 3.0, 9 x USB 3.2 , 1 x USB Type C, 2 x M.2, Dual 10GbE, and IPMI



CE FCC

Features

- LGA4677 ATX server board supports Intel Xeon® W-3500/2500 and W-3400/2400 series, TDP up to 385W
- DDR5 RDIMM 4800/5200/5600 (W-3500/2500) and 4400/4800 (W-3400/2400)
- 3 x PCIe x16 (Gen5), 1 x PCIe x8 (Gen5), and 2 x PCIe x4 (Gen4)
- Intel® X710 dual 10GbE ports
- 8 x SATA 3 and 2 x M.2 connectors (PCIe x4)
- 9 x USB 3.2 ports including one Gen2x2 via Type E-Key A connector
- 0 ~ 60°C (32 ~ 140°F) ambient operating temperature range

Specifications

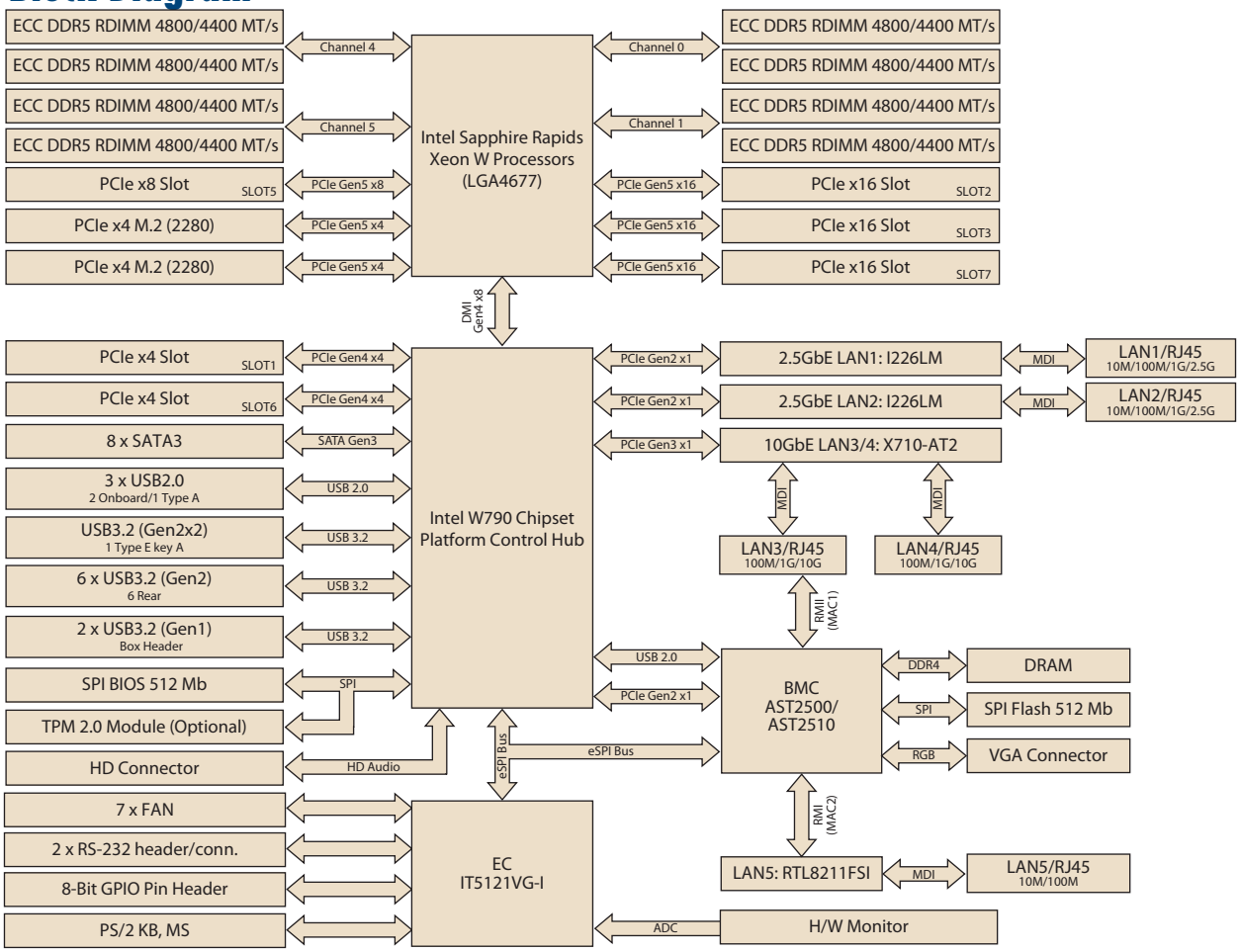
Form Factor		ATX form factor				
Processor System	Socket	Intel® LGA4677 (Socket E)				
	CPU type	Intel Xeon® W-3500/2500 and W-3400/2400 processor (CPU cooler should be purchased separately)				
Core Logic	Chipset	Intel® W790 chipset				
Memory	Total slots	8 (2 DIMMs per channel)				
	Capacity	Maximum 2TB ECC RDIMM				
	Memory type	DDR5 ECC-REG 4400/4800* 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 1	PCIe x4 slot (x4 link), signal from PCH				
	Slot 2	PCIe x16 slot (x16 link), signal from CPU, CXL support				
	Slot 3	PCIe x16 slot (x16 link), signal from CPU, CXL support				
	Slot 4	-				
	Slot 5	PCIe x8 slot open end (x8 link), signal from CPU				
	Slot 6	PCIe x4 slot (x4 link), signal from PCH				
	Slot 7	PCIe x16 slot (x16 link), signal from CPU, CXL support				
Graphics	VGA	AST2500 (T2 SKU) / AST2510 (non-I SKU)				
Storage	SATA controller	Intel® W790: 8 x SATA 3.0 (6 Gb/s), support software RAID 0, 1, 5, 10				
	SAS controller	-				
Networking	2.5GbE	2 x Intel® I226LM				
	10GbE	2 x Intel® X710-AT2				
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V for CPU + 8-pin SSI 12 V for system				
	USB connector	6, 3 x USB 2.0 (one onboard header, one Type A) + 2 x USB 3.2 Gen1 (one onboard header) + 1 x USB 3.2 Gen2 (1 x Type-E A-Key header)				
	M.2 connector	2 x M.2 2280 B+M-Key (PCIe)				
	Fan header	7 x 4-pin (6 for System + 1 for CPU)				
	SMBus	1				
	Chassis intrusion	1				
	Front LAN LED	1				
	Serial port header	1				
	Audio header	1				
	PS/2 KB/mouse	1				
Rear I/O Connector	External serial port	1				
	External USB port	6 x USB 3.2 Gen2				
	VGA port	1				
	RJ-45	5 x for T2 version, 3 x for non-I version				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec				
Power Requirement	Power On	3.3V	5V	12V	12V_8P	5VSB
	(CPU/ DDR spec TBD)	2.94A	1.81A	0.03A	19.36A	0.14A
Environment		Operating				Non-operating
	Temperature	0 ~ 60°C, depending on CPU speed and cooler solution				-40 ~ 85°C
	Humidity	40°C @95% RH non-condensing				60°C @95% RH non-condensing
Physical Characteristics	Dimensions	304.8 x 244 mm (12 x 9.6 in)				

* 4800MT/s can only be supported with 1 DIMM per channel configuration (2 DIMMs in total).

All product specifications are subject to change without notice.

Last updated: 19-Nov-2026

Block Diagram



Ordering Information

Part Number	Chipset	Memory	2.5GbE/ 10GbE LAN	IPMI	Graphics
ASMB-807T2-00A1	W790	DDR5 RDIMM	2/2	Yes	AST2500
ASMB-807-00A1	W790	DDR5 RDIMM	2/-	No	AST2510

Packing List

Part Number	Description	Quantity
2042080700	Startup manual	1
1700003194	SATA data cables	2
1700022749-11	SATA power cables	2
1930005673-11	Screw for M.2 device	2
1960116407N001	I/O shield	1
1651003738-01	LGA4677 CPU carrier - E1A (W-3400, W3500)	1
1651003739-01	LGA4677 CPU carrier - E1B (W-2400, W2500)	1

Accessories

Part Number	Description
PCA-AUDIO-HDB1E	HD Audio-card*
PCA-TPMSPI-00A1	TPM 2.0 Module by SPI
1970005933N001	LGA-4677 tower CPU cooler for Max. TDP 385W
1700031926-11	JFP2 cable
1700002204	Dual port USB cable (27 cm/10.6 in) with bracket
1700008461	Four port USB cable (30.5 cm/12 in) with bracket
1700028292-01	Dual port USB 3.2 (Gen1) cable (30 cm/11.8 in) with bracket
1701090401	COM port cable (40 cm/15.7 in) with bracket
1700019268-11	PS/2 port cable (35 cm/13.77 in)
1700036239-01	M cable USB-E 20P(M)/USB-C 24P(F) 65cm W/BKT 3.2
1960063434N000	Cable bracket for 1700019268-11

* PCA-AUDIO-HDB1E isn't compatible with 3U chassis.
* The maximum supported CPU TDP depends on the system's thermal design and cooling solution. E.g., HPC-7485: 385W / HPC-7484 & 7000: 270W / HPC-7442: 200W

I/O View



ASMB-807T2-00A1



ASMB-807-00A1