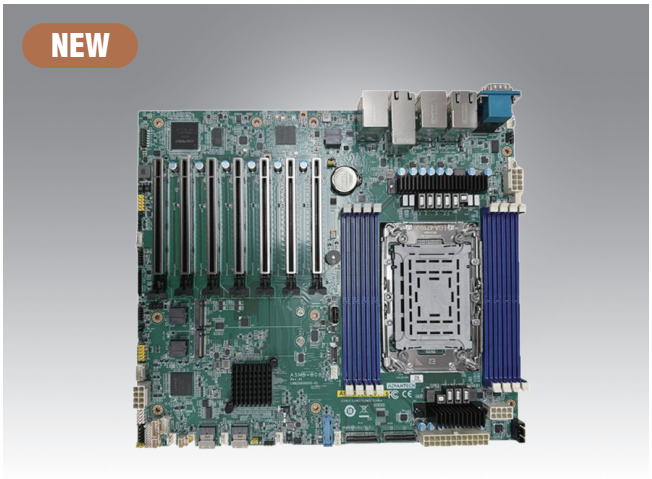
ASMB-808

Intel® Xeon® W Processors CEB Server Board with 8 x DDR5, 7 x PCIe x16, 8 x SATA 3.0, 7 x USB 3.2 ,Gen1, 1 x USB 3.2 Gen2 Type-C, 1 x USB 3.2 Gen2x2 Type-C, 2 x M.2, Dual 2.5GbE, Dual 10GbE, and IPMI



CE FCC

Features

- LGA4710 CEB server board with Xeon® GNR-W 690/670/650/630 series, TDP up to 350W
- DDR5 6400 MT/s RDIMM up to 2TB (8 DIMMs), also supports MRDIMM
- 7 x PCIe x16 (Gen5)
- Intel E610 dual 10GbE ports
- 8 x SATA 3 (via 2 x SlimSAS) and 2 x M.2 connectors (PCIe x4)
- 7 x USB 3.2 Gen1 (5 on Rear, 2 via internal header), 1 x USB 3.2 Gen2 (Type E-key), 1 x USB 3.2 Gen2x2 Type-C, 3 x USB 2.0 (1 Type-A, 2 via internal header)
- 0 ~ 60°C (32 ~ 140°F) ambient operating temperature range

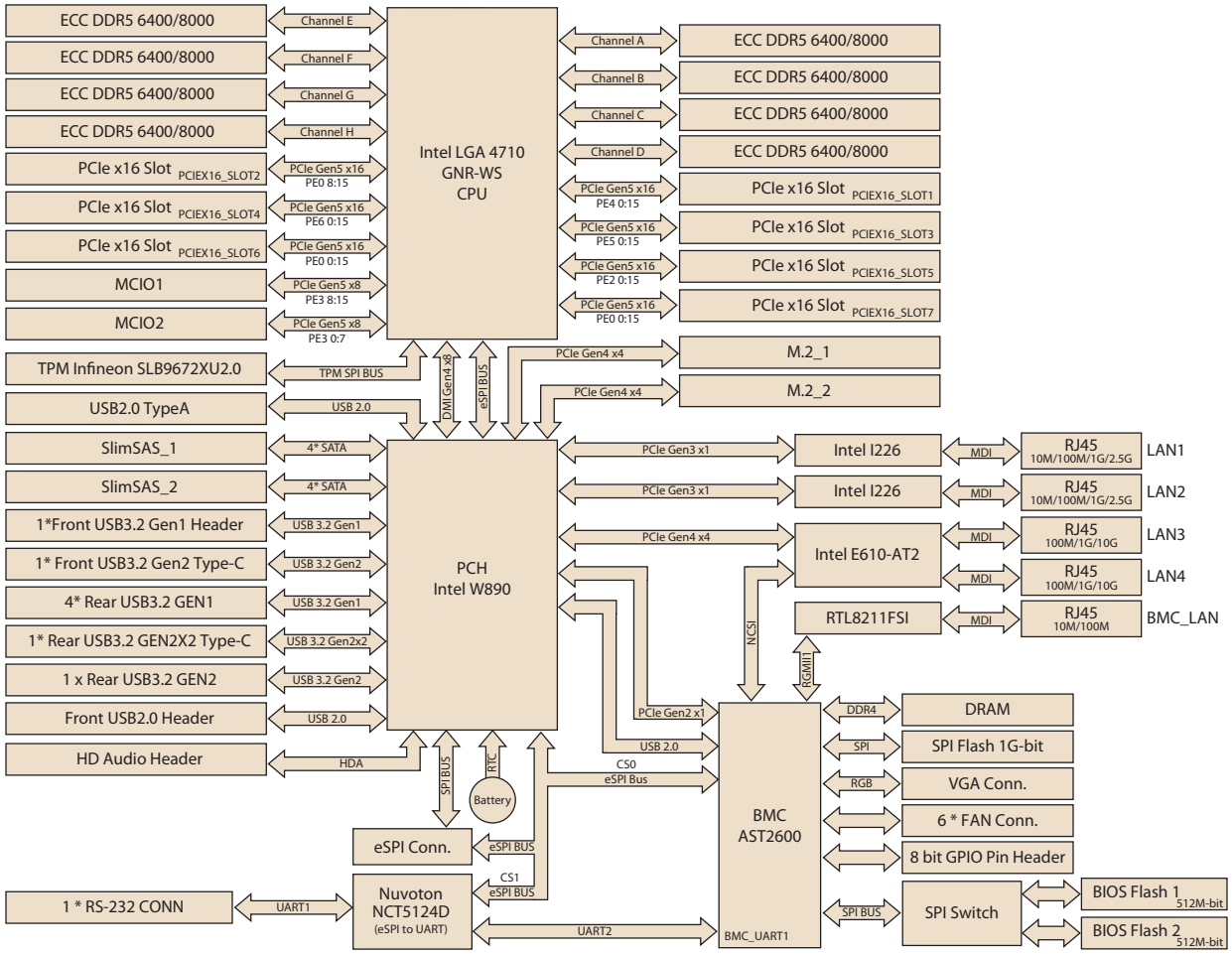
Specifications

Form Factor		CEB form factor				
Processor System	Socket	Intel® LGA4710				
	CPU type	Intel Xeon® GNR-W 690/670/650/630 processor (CPU cooler should be purchased separately)				
Core Logic	Chipset	Intel® W890 chipset				
Memory	Total slots	8 (1DPC)				
	Capacity	Maximum 2TB ECC RDIMM, also supports MRDIMM*				
	Memory type	DDR5 ECC-REG 6400 MT/s RDIMM				
	Memory size	16GB, 32GB, 64GB, 128GB, 256GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	7**				
	Slot 1	PCIe x16 slot (x16 link), signal from CPU, CXL support				
	Slot 2	PCIe x16 slot (x16 link), signal from CPU				
	Slot 3	PCIe x16 slot (x16 link), signal from CPU, CXL support				
	Slot 4	PCIe x16 slot (x16 link), signal from CPU				
	Slot 5	PCIe x16 slot (x16 link), signal from CPU, CXL support				
	Slot 6	PCIe x16 slot (x16 link), signal from CPU				
	Slot 7	PCIe x16 slot (x16 link), signal from CPU, CXL support				
Graphics	VGA	AST2600				
Storage	SATA controller	Intel® W890: 8 x SATA 3.0 (6 Gb/s) via 2 x SlimSAS				
	SAS controller	-				
Networking	2.5GbE	2 x Intel® I226LM				
	10GbE	2 x Intel E610				
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 M-Key (PCIe Gen4 x4)				
	MCIO	2 (PCIe Gen5 x8), CXL support				
	Fan header	7 x 4-pin (6 for system + 1 for CPU)				
	SMBus	1				
	Chassis intrusion	1				
	Front LAN LED	1				
	Serial port header	-				
	Audio header	1				
	PS/2 KB/mouse	-				
Rear I/O Connector	External serial port	1				
	External USB port	5 x USB 3.2 Gen1, 1 x USB 3.2 Gen2x2 Type-C				
	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 (CPU/ DDR spec TBD)	3.3V 2.29A	5V 2.58A	12V 1.97A	12V_8P 32.86A	5VSB 0.13A
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 266.7 mm (12 x 10.5 in)				

* MRDIMM only Support Exper Workstation (128 Lanes)
** If using Mainstream CPU, only PCIe 1/3/5/7 can work.

All product specifications are subject to change without notice.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	2.5GbE/ 10GbE LAN	IPMI	Graphics
ASMB-808T2-00A1	W890	DDR5 RDIMM	2/2	Yes	AST2600
ASMB-808I-00A1	W890	DDR5 RDIMM	2/-	Yes	AST2600

Packing List

Part Number	Description	Quantity
2042080800	Startup manual	1
1930005673-11	Screw for M.2 device	2
1960120922T001	I/O shield	1
1651003851-01	LGA-4710 CPU carrier - E2A (XCC)	1
1651003850-01	LGA-4710 CPU carrier - E2B (MCC)	1
1960109237N010	PCIe I/O support	1

Accessories

Part Number	Description
PCA-AUDIO-HDB1E	HD Audio-card*
1970005860N000	LGA-4677/4710 CPU cooler for 2U chassis (350W)
1970005933N001	LGA-4710/4677 tower CPU cooler for 4U chassis (350W)
1700031926-11	JFP2 cable
1700002204	Dual port USB cable (27 cm/10.6 in) with bracket
1700028292-01	Dual port USB 3.2 (Gen1) cable (30 cm/11.8 in) with bracket
1700036239-01	M cable USB-E 20P(M)/USB-C 24P(F) 65cm W/BKT 3.2
1700031926-11	Front panel convert cable
1700036239-01	Type-C cable with Bracket

* 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-808T2-00A1



ASMB-808I-00A1