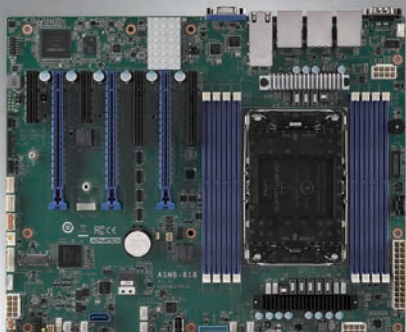


ASMB-818

6th Gen Intel® Xeon® Scalable ATX Server Board with 8 x DDR5, 3 x PCIe x16, 5 SATA 3.0, 4 x USB 3.2 (Gen1), 1 x M.2, Dual 10GbE, and IPMI

Preliminary



Features

- LGA4710 EATX server board with 6th Gen. Xeon® Scalable processor, TDP up to 350W
- DDR5 6400 MHz RDIMM up to 2TB (8 DIMMs), also supports MCRDIMM
- Three PCIe x16 (Gen 5) + one PCIe x8 (Gen 5), or two PCIe x16 (Gen 5) + three PCIe x8 (Gen 5)
- Intel® X710 dual 10GbE ports
- Five SATA 3 and one M.2 connectors (PCIe x4)
- 0 ~ 60°C (32 ~ 140°F) ambient operating temperature range

CE FCC

Specifications

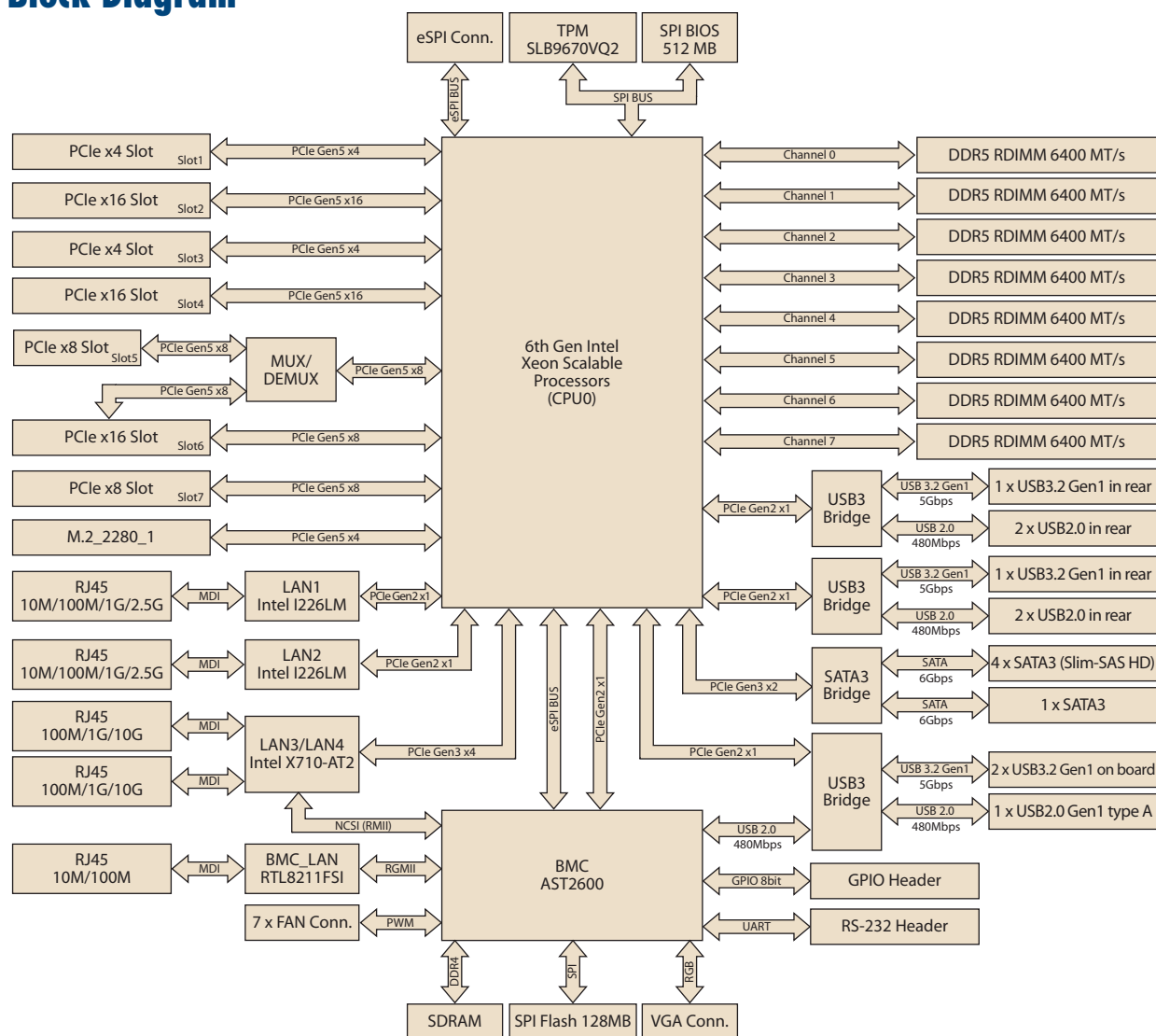
Form Factor	ATX form factor	
Processor System	Socket	Intel LGA4710
	CPU type	Intel 6th Generation Xeon Scalable processors (CPU cooler should be purchased separately*)
Core Logic	Chipset	-
Memory	Total slots	8 (1 DIMM per channel)
	Capacity	Maximum 2TB ECC RDIMM
	Memory type	DDR5 ECC-REG 6400 MHz RDIMM, 8000 MHz MCRDIMM
	Memory size	16GB, 32GB, 64GB, 128GB, 256GB
Expansion Slot	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x4 slot (x4 link), signal from CPU
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU, CXL support
	Slot location 3	PCIe x4 slot (x4 link), signal from CPU
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU, CXL support
	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, CXL support
Graphics	VGA	Aspeed AST2600
	SATA controller	Asmedia ASM1165: 4 x SATA3.0 (6 Gb/s) via Slim-SAS HD, 1 x SATA3.0 (6Gb/s)
Storage	SAS controller	-
	2.5GbE	2 x Intel® I226LM
Networking	10GbE	2 x Intel® X710-AT2
Onboard I/O connector	PSU connector	24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector
	USB connector	3, 2 x USB 3.2 Gen1 (one onboard header) + 1 x USB 2.0 (one Type A)
	M.2 connector	1 x M.2 2280 B+M key (PCIe)
	Fan header	7 x 4pin (6 for system + 1 for CPU)
	SMBus	1
	Chassis intrusion	1
	Front LAN LED	1
	Serial port header	-
	Audio header	-
Rear I/O Connector	PS/2 KB/Mouse	-
	External serial port	1
	External USB port	6, 2 x USB 3.2 Gen1 + 4 x USB 2.0
	VGA port	1
	DVI port	-
	HDMI port	-
	DP port	-
	RJ-45	5 (1 port dedicated for IPMI function)
	Audio connector	-
	PS/2 KB/Mouse	-
	Infiniband	-

* CPU power design support up to 350W TDP

Specifications (Cont.)

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					
Power Requirement	Power On (CPU/ DDR spec TBD)	3.3 V	5 V	12 V	5 VSB	-12 V	12 V_8P
Environment		Operating			Non-operating		
	Temperature	0 ~ 60°C (32 ~ 140°F), depending on CPU speed and cooler solution			-40 ~ 85 °C/-40 ~ 185 °F		
	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")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	2.5GbE/ 10GbE LAN	IPMI	Graphics
ASMB-818T2-00A1	-	8 x DDR5 RDIMM	2/2	Yes	AST2600
ASMB-818I-00A1	-	8 x DDR5 RDIMM	2/-	Yes	AST2600

Packing List

Part Number	Description	Quantity
2042081800	Startup manual	1
1700003194	SATA data cables	1
1700022749-11	SATA power cables	1
1700019748	CPU power cable	2
1930005673-11	Screw for M.2 device	1
TBD	I/O shield	1
1960109237N010	PCIe I/O support	1
1651003851-01	LGA-4710 CPU carrier - E2A (XCC)	1
1651003850-01	LGA-4710 CPU carrier - E2B (MCC)	1
1700031926-11	Front panel convert cable	1

Optional Accessories

Part Number	Description
1970005860N000	LGA-4710/4677 narrow CPU cooler for 2U/4U chassis (TBD)
1970005933N001	LGA-4710/4677 tower CPU cooler for 4U chassis (TBD)
1700028292-01	Dual port USB 3.2 (Gen1) cable (30 cm/11.8 in) with bracket
TBD	For 1U chassis I/O shield

Note:
1. Select SATA cable from HPC chassis datasheet or contact sales representative.

I/O View



ASMB-818T2-00A1



ASMB-818I-00A1