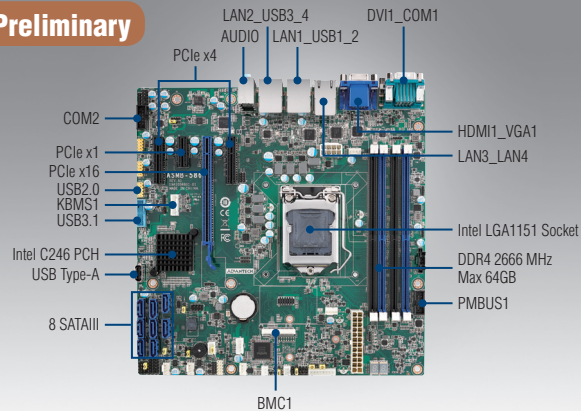


ASMB-586

LGA 1151 Intel® Xeon® E & 8th Generation Core™ MicroATX Server Board with 4 DDR4, 4 PCIe, 6 USB 3.1, 8 SATA3, Quad/Dual LANs, IPMI

Preliminary



Features

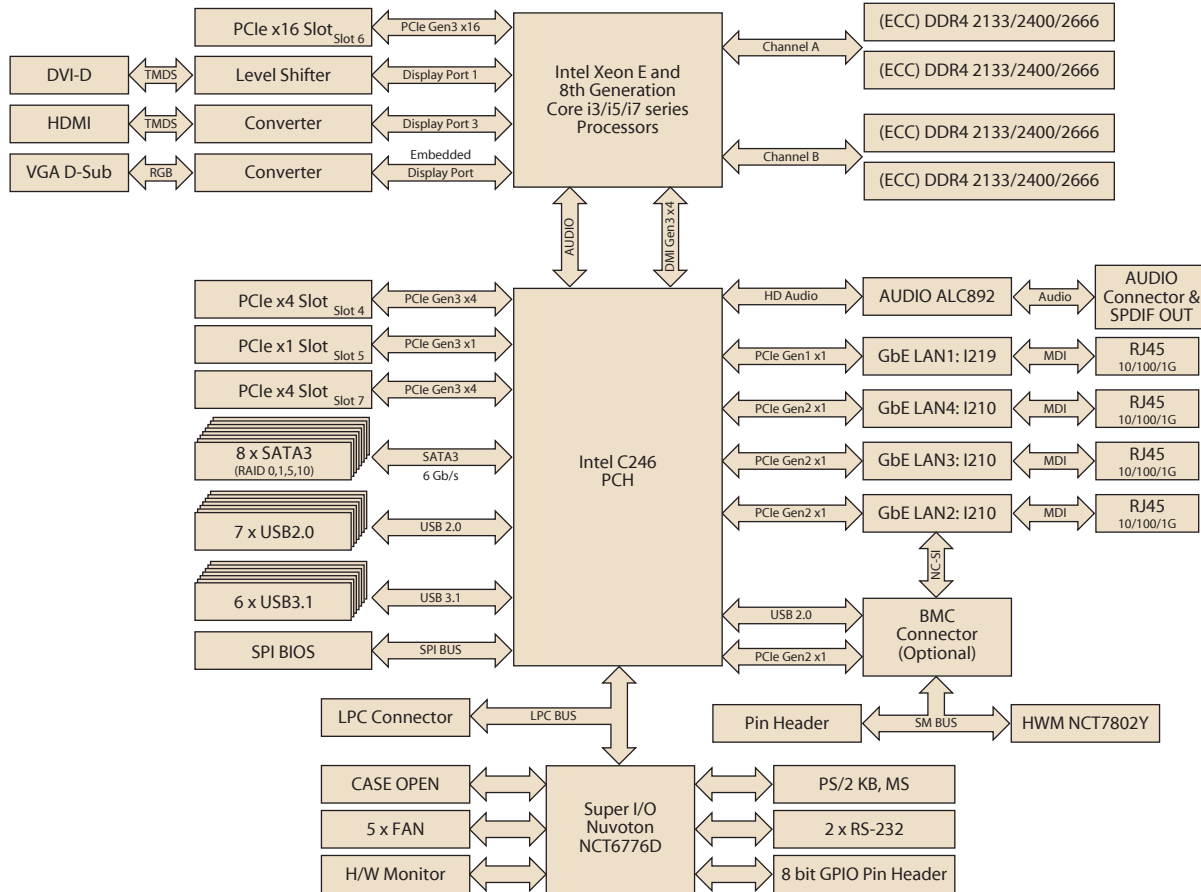
- Supports LGA 1151 Intel® Xeon® E and 8th generation Core™ i7/i5/i3 processors
- DDR4 ECC/Non-ECC 2666/2400/2133 MHz UDIMM up to 64GB
- One PCIe x16, three PCIe x4 and one PCIe x1 slots
- Triple displays - DVI-D, VGA and HDMI 2.0 ports
- Eight SATA3 ports and six USB 3.1 ports
- 0 ~ 60° C ambient operating temperature range

CE FCC

Specifications

Form Factor		Micro ATX form factor
Processor System	Socket	Intel LGA 1151
	CPU type	Intel® Xeon® E and 8th Gen Core™ i3/i5/i7 series processors (TDP up to 95W)
Core Logic	Chipset	Intel C246 chipset
	Total slots	4 (Dual Channel)
Memory	Capacity	Maximum 64 GB
	Memory type	DDR4 ECC/Non-ECC 2666/2400/2133 MHz UDIMM (288-pin)
	Memory size	4 GB, 8 GB, 16 GB
Expansion Slots	Total PCIe slots	4
	Slot location 1	-
	Slot location 2	-
	Slot location 3	-
	Slot location 4	PCIe x4 slot (Gen3 x4 link)
	Slot location 5	PCIe x1 slot (Gen3 x1 link)
	Slot location 6	PCIe x16 slot (Gen3 x16 link)
Graphics	VGA	Intel HD Graphics
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed
Storage	SATA controller	Intel C246: 8 SATA3 6Gb/s Intel Matrix Storage (for Windows only)
	SAS controller	-
Networking	GbE LAN	1 x Intel I219LM + 3 x Intel I210AT
Onboard I/O Connector	LPT connector	-
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector
	USB connector	1 USB 3.1 Gen 1 (2 ports), 3 USB 2.0 (6 ports), 1 USB Type-A
	Fan header	5 (4-pin)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Serial port header	1 (supports 2 x serial ports)
	Audio Header	1 (ALC 892)
	PS/2 KB/Mouse	1
Rear I/O Connector	External serial port	1
	External USB port	4 (USB 3.1 Gen 2)
	VGA port	1
	DVI port	1
	HDMI	1
	RJ-45	4
	PS/2 KB/mouse	-
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirement	Power On	3.3 V 5 V 12 V 12V_8P 5 Vsb -12 V
	(i7-8700@3.2GHz DDR4 2400 4G*4)	3.87A 4.11A 0.63A 6.18A 0.09A 0.238A
Environment	Temperature	Operating: 0 ~ 60° C, depends on CPU speed and cooler solution Non-operating: -40 ~ 85° C
	Humidity	0% ~ 90% 5% ~ 95% (Non condensing)
Physical Characteristics	Dimensions	244 x 244 mm (9.6" x 9.6")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	SATAIII	IPMI
ASMB-586G2-00A1E	C246	DDR4 ECC/Non-ECC	2	8	Optional
ASMB-586G4-00A1E	C246	DDR4 ECC/Non-ECC	4	8	Optional

Packing List

Part Number	Description	Quantity
2001S58610	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
(TBD)	I/O shield	x 1

Optional Accessories

Part Number	Description
1960049408N001	LGA 1151 CPU heatsink for 1U chassis (TDP up to 95W)
1960052651N021	LGA 1151 CPU cooler for 2U/4U chassis (TDP up to 95W) (TBD)
(TBD)	1U IO bracket for ASMB-586
1700002204	Dual port USB2.0 cable (27 cm) with bracket
1700008461	Four port USB2.0 cable (30.5 cm) with bracket
1700020277-01	Dual port USB3.0 cable (30 cm) with bracket
1701090401	Single port RS-232 cable(40cm) for COM2 connector
1700019268-11	Cable for onboard KBMS1 connector (35cm)
1960063434N000	Cable bracket for 1700019268-11
IPMI-1000-00A2E	IPMI 2.0 Module
PCA-COM232-00A1E	4 ports RS-232 module connect to LPC connector
PCA-COM485-00A1E	4 ports RS-422/485 module connect to LPC connector
PCA-TPM-00B1E	TPM 2.0 Module by LPC

I/O View



ASMB-586G4-00A1



ASMB-586G2-00A1

Note 1: Purchasing ASMB-586's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers may NOT compatible with ASMB-586.