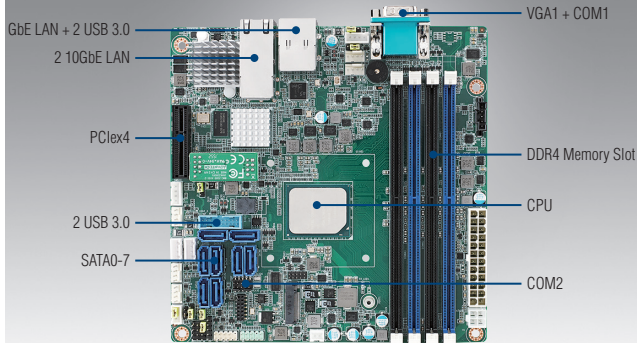


ASMB-260

Intel® Atom® C3000 Mini-ITX Server Board with 4 DDR4, 1 PCIe x4, 8 SATA3, 4 USB 3.0, Dual 10GbE, IPMI

NEW



Features

- Mini-ITX server board with Intel® Atom® C3000 processor
- Four DDR4 2400MHz ECC/Non-ECC UDIMM up to 64GB or four DDR4 2400MHz RDIMM up to 128GB
- One PCIe x4, 8 SATA III, one M.2, four USB 3.0, and two 10GbE/one GbE LAN
- 0 ~ 60 °C ambient operation temperature range

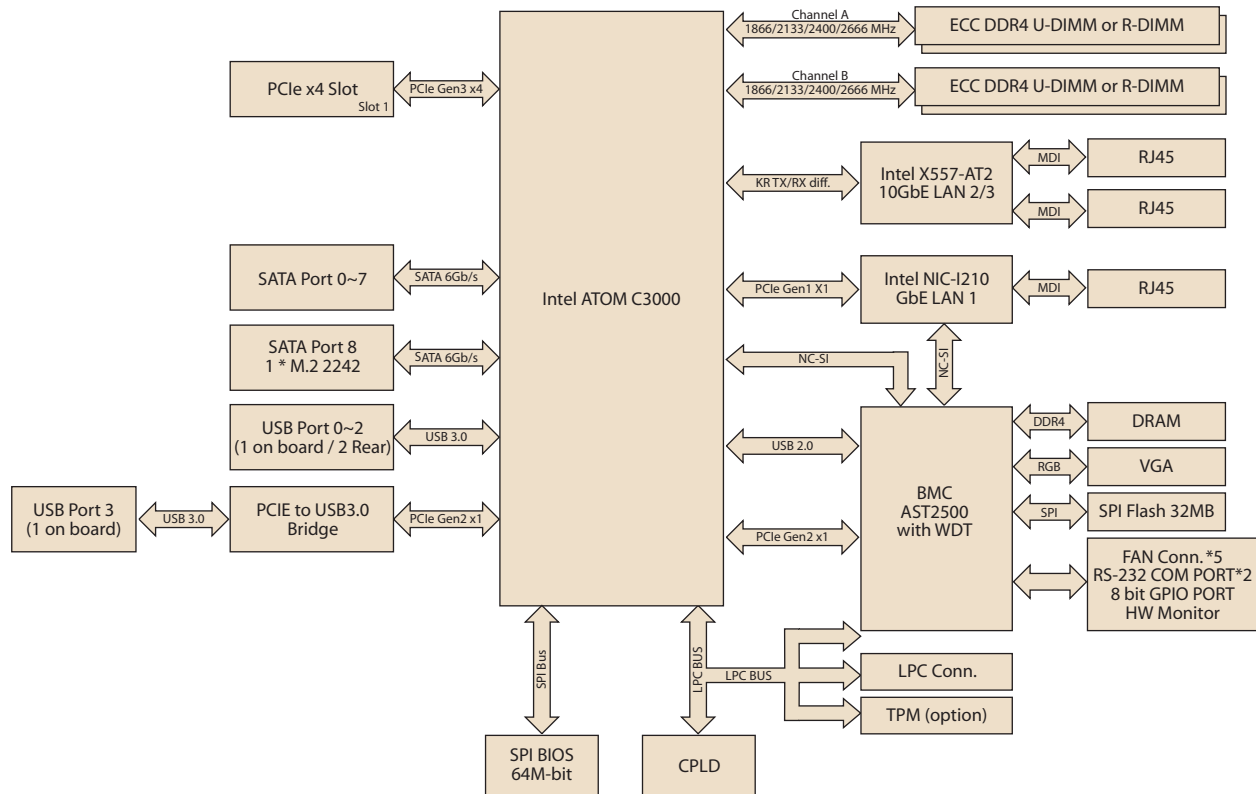


Specifications

Form Factor		Mini-ITX form factor				
Processor System	Socket	Onboard SOC				
	CPU type	Intel® Atom® C3000				
Core Logic	Chipset	N/A				
	Total slots	4 (Dual Channel)				
Memory	Capacity	Maximum 128GB for RDIMM Maximum 64GB for UDIMM				
	Memory type	DDR4 2400/2133/1866/1600 MHz DIMM				
	Memory size	4 GB, 8 GB, 16 GB, 32GB (only for RDIMM)				
Expansion Slots	Total PCI/PCI-X/PCIe slots	1				
	Slot location 1	PCIe x4 slot (Gen3 x4 link)				
Graphics	VGA	Aspeed AST 2500				
Storage	IDE controller	-				
	SATA controller	8 x SATA III + 1 x M.2 6 Gb/s ports				
	SAS controller	-				
Networking	GbE/10GbE LAN	Intel I210AT/Intel X557-AT2 (dual 10GbE ports)				
Onboard I/O Connector	LPC connector	1				
	PSU connector	24-pin ATX power connector or 4-pin 12V DC input				
	USB connector	1 x USB3.0 pin header (supports 2 x USB 3.0 port*)				
	Fan header	5 x 4-pin (4 for system + 1 for CPU)				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	1				
	Audio Header	-				
	Serial port header	1				
	Rear I/O Connector	External serial port	1			
External USB port		2 (supports 2 x USB 3.0)				
VGA port		1				
RJ-45		3 (share NIC for IPMI function)				
PS/2 KB/mouse		-				
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
		0.10A	0.10A	6.41A	0.54A	0A
		Operating				
Environment	Temperature	0 ~ 60 °C, depends on CPU speed and cooler solution				-40 ~ 85 °C
	Humidity	10% ~ 95%				10% ~ 95% (Non condensing)
Physical Characteristics	Dimension (L x H)	170 x 170 mm (6.7" x 6.7")				

*USB boot feature can't be supposed on USB port 4.

Block Diagram



Ordering Information

Part Number	CPU	Memory	10GbE Lan	GbE Lan	SATA	M.2	VGA	IPMI
ASMB-260T2-22A1	C3758	4 xDDR4 RDIMM/UDIMM	2	1	8	1	AST 2500	Yes
ASMB-260I-22A1	C3758	4 xDDR4 RDIMM/UDIMM	-	1	8	1	AST 2500	Yes
ASMB-260I-21A1	C3558	4 xDDR4 RDIMM/UDIMM	-	1	2	0	AST 2500	Yes

Packing List

Part Number	Description	Quantity
2061260I00	Driver CD	x 1
2001026000	Start manual	x 1
1960052312T020	I/O shield	x 1
1700003194	SATA Data Cables	x 2
1930007120-01	Screw for M.2 device	x 2
1700024372-01	SATA Power cable	x 2

Optional Accessories

Part number	Description
1960080721N001	Atom C3000 cooler for 1U/2U and tower chassis
1700019414	COM port cable w/o bracket
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700020277-01	Dual port USB3.0 cable (30 cm) with bracket
19Z0000406T110	1U I/O shield

Note: Purchasing ASMB-260's proprietary CPU cooler from Advantech is a must.

I/O View



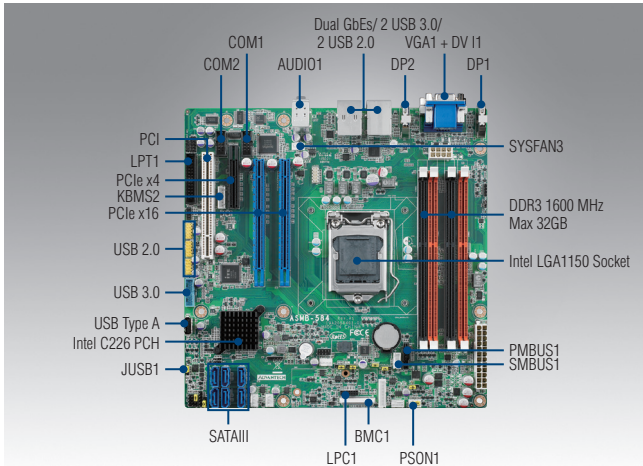
ASMB-260T2-22A1



ASMB-260I-22A1
ASMB-260I-21A1

ASMB-584

LGA 1150 Intel® Xeon® E3 v3/ 4th Generation Core™ Micro ATX Server Board with 2 PCIe x16 slots (x8 link), 1 PCIe x4, 1 PCI, USB 3.0, Dual LANs



Features

- Supports LGA 1150 Intel® Xeon® E3 v3 and 4th generation Core™ i7/i5/i3 processors
- DDR3 1600 MHz ECC UDIMM up to 32GB
- Two PCIe x16 slots (x8 link), one PCIe x4 and one PCI slots
- Rackmount optimized placement with positive air flow design
- Supports Intel vPro, AMT 9.0, IPMI (optional), software RAID 0,1,5,10 and embedded software APIs/utilities



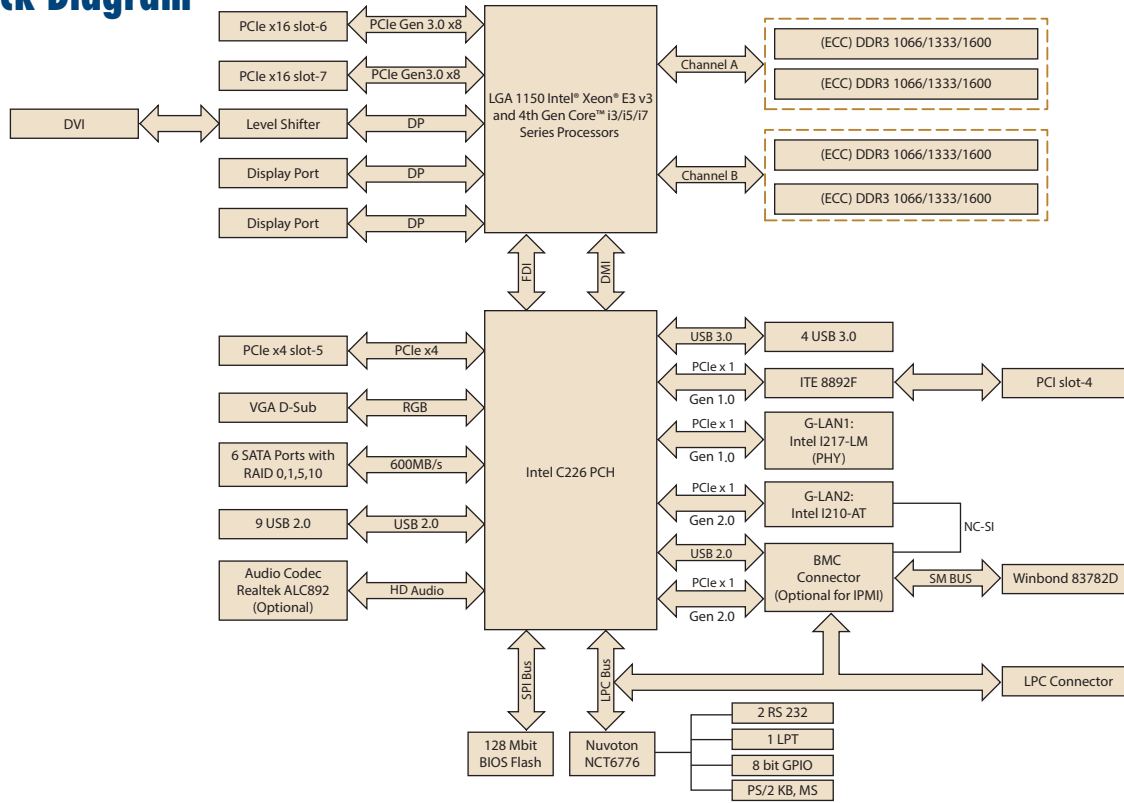
Specifications

Form Factor		Micro ATX form factor	
Processor System	Socket	Intel LGA 1150	
	CPU type	Intel® Xeon® E3-1200 v3 and Core™ i3/i5/i7 series (TDP up to 88W)	
Core Logic	Chipset	Intel C226 chipset	
Memory	Total slots	4 (Dual Channel)	
	Max. capacity	32 GB	
	Memory type	DDR3 ECC/Non-ECC 1600/1333/1066 MHz UDIMM (240-pin)*	
	Memory size	1 GB, 2 GB, 4 GB, 8 GB	
Expansion Slots	Total PCI/PCI-X/PCIe slots	4	
	Slot location 1	-	
	Slot location 2	-	
	Slot location 3	-	
	Slot location 4	PCI	
	Slot location 5	PCIe x4 (Gen2 x4 link)	
	Slot location 6	PCI x16 slot (Gen3 x8 link)	
Graphics	Controller	Intel HD Graphics**	
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed	
Storage	SATA controller	Intel C226: 6 SATA3 6 Gb/s ports with Intel Rapid Storage Technology support (for Windows only) (Supports software RAID 0, 1, 10 & 5)	
	SAS controller	-	
Networking	Interface	10/100/1000 Mbps	
	Controller	GbE LAN1: Intel I217-LM; GbE LAN2: Intel I210-AT	
	Connector	RJ-45 x 2	
Onboard I/O Connector	Printer Port connector	1	
	PSU connector	24-pin SSI power connector + 8-pin SSI 12V power connector	
	USB connector	2 USB 3.0; 7 USB 2.0 (1 x USB Type-A)	
	Fan header	5 (4-pin)	
	SMBus	2	
	Chassis intruder	1	
	Front LAN LED	1	
	Serial port header	2 (RS-232)	
	Audio Connector	1 (ALC 892)	
	PS/2 KB/Mouse	1	
Rear I/O Connector	External serial port	-	
	External USB port	4 (2 USB 3.0 and 2 USB 2.0)	
	VGA port	1	
	DVI	1	
	Display Port	2	
	RJ-45	2 for G2 version	
	PS/2 KB/mouse	-	
Audio	2 (Mic-in, Line-out)		
Watchdog Timer	Output	System reset	
	Interval	Programmable 1 – 255 sec	
Power Requirement	Power On	Intel LGA1150 2.6GHz; DDR3 4G x4	
		3.3 V 5 V 12 V 12V_8P 5 Vsb -12 V	
		3.7 A 2.22 A 0.07 A 3.77 A 0.12 A 0.02 A	
Environment	Operating	Non-operating	
		Temperature	0 – 60 °C (32 ~ 140 °F) Depends on CPU speed and cooler solution
		Humidity	5% – 95% (Non-condensing)
Physical Characteristics	Dimension (L x H)	244 x 244 mm (9.6" x 9.6")	

* ECC memory support or not depends on Intel processor specification.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	DVI	Display Port	IPMI	PCI / PCIe Slots
ASMB-584G2-00A1E	C226	DDR3 ECC UNB/Non-ECC	2	1	2	Optional Module	1 / 3
ASMB-584G2-00A2E*	C226	DDR3 ECC UNB/Non-ECC	2	1	2	Optional Module	0 / 3
ASMB-584VG-00A1E	C226	DDR3 ECC UNB/Non-ECC	1	1	N/A	N/A	1 / 3

*ASMB-584G2-00A2E is designed for 1U & 2U chassis with riser.

Packing List

Part Number	Description	Quantity
2066S58402	Driver CD	x 1
2006S58410	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
19Z0000470T000	I/O shield	x 1

I/O View



ASMB-584G2-00A1E
ASMB-584G2-00A2E



ASMB-584VG-00A1E

Optional Accessories

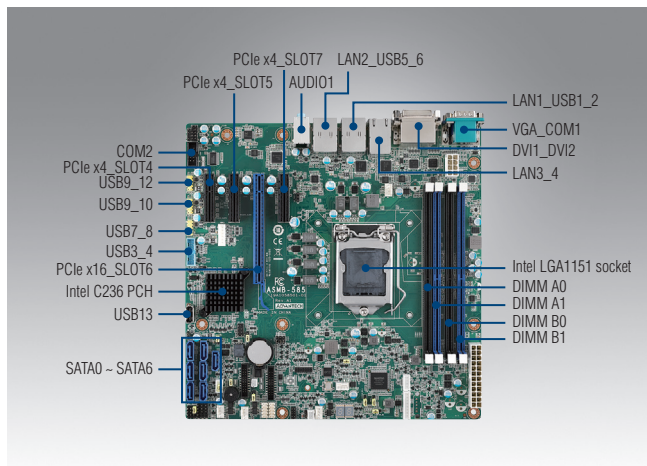
Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960052651N021	LGA 1151/1150/1155 CPU cooler for 2U/4U and wallmount chassis
1960049408N001	LGA 1151/1150/1155 1U CPU Cooler
19Z0001023T000	1U I/O shield
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	COM port cable with bracket (40 cm)
1700020277-01	Dual port USB 3.0 cable with bracket (30 cm)
ASMB-RF348-21A1E	2U riser card (PCIe x16 to 2 PCIe x4 + 1 PCIe x8)
AIMB-RF10F-01A1E	1U riser card (PCIe x16 to PCIe x16)
IPMI-1000-00A1E	IPMI 2.0 Module
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: To enable Intel vPro feature, PCA-TPM-00A1E must be installed. TPM and IPMI modules are installation alternatives.

Note 2: Purchasing ASMB-584's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-584.

ASMB-585

LGA 1151 Intel® Xeon® E3 v5/v6 & 6th/7th Generation Core™ Series Micro ATX Server Board with 4 DDR4, 1 PCIe x16, 3 PCIe x4, Quad LANs, USB 3.0



Features

- Supports LGA 1151 Intel® Xeon® E3-1200 v5/v6 and 6th/7th generation Core™ i7/i5/i3 processors
- DDR4 ECC/non-ECC 2400/2133/1866/1600 MHz DIMM up to 64GB
- One PCIe x16 slot (Gen3 x16 link), three PCIe x4 slots (2 Gen3 x4 link, 1 Gen3 x1 link)
- Triple display - two DVI-D and one VGA ports
- Supports up to ten RS-232 or six RS-232 and four RS-422/485 ports
- Rackmount optimized placement with positive air flow design
- 0 ~ 60 °C ambient operation temperature range

Note: Intel Xeon E3 v6 & 7th Core processors only support Windows 10 (64-bit) and Server 2016 (64-bit).



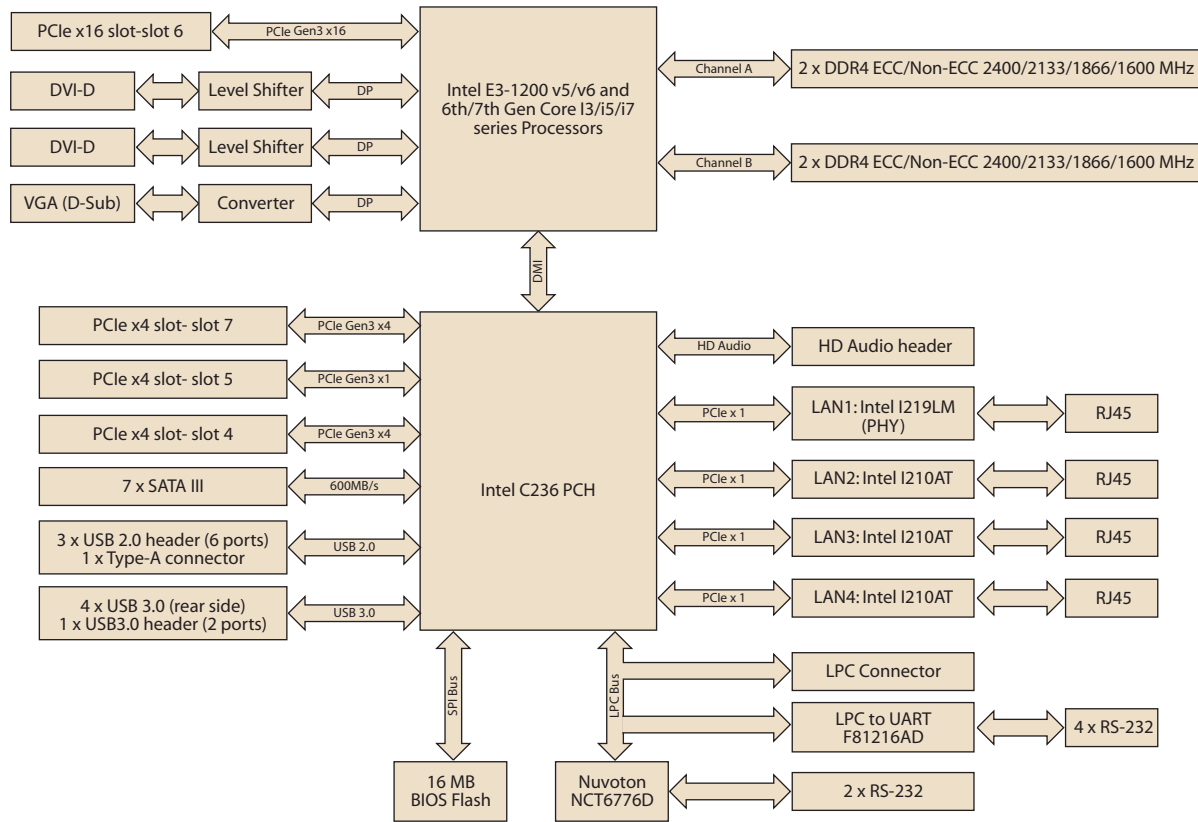
Specifications

Form Factor		Micro ATX form factor				
Processor System	Socket	Intel LGA 1151				
	CPU type	Intel® Xeon® E3-1200 v5/v6 and 6th/7th Gen Core™ i3/i5/i7 series processors (TDP up to 91W)				
Core Logic	Chipset	Intel C236 chipset				
Memory	Total slots	4				
	Capacity	Maximum 64 GB				
	Memory type	DDR4 ECC/Non-ECC 2400/2133/1866/1600 MHz UDIMM*				
	Memory size	4 GB, 8 GB, 16 GB				
Expansion Slots	Total PCI/PCI-X/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 x4 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 C236: 7 SATA3 6Gb/s Intel Rapid Storage Technology (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	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 2.0 connector	3 (supports 6 x USB2.0 port), 1 x Type-A				
	USB 3.0 connector	1 (support 2 x USB 3.0 port)				
	Fan header	5 x 4pin				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	2				
	Audio Header	1 (ALC 892)				
	Serial port header	3 (supports 5 x serial ports)				
	Rear I/O Connector	External serial port	1			
External USB port		4 x USB 3.0				
VGA port		1				
DVI port		2				
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	5 Vsb	-12 V
		0.68A	1.31A	1.04A	0.13A	0.06A
Environment	Temperature	Operating	Non-operating			
		0 ~ 60 °C, depends on CPU speed and cooler solution	-40 ~ 85 °C			
		Humidity	5% ~ 95% (Non condensing)			
Physical Characteristics	Dimension (L x H)	244 x 244 mm (9.6" x 9.6")				

* ECC memory support or not depends on Intel processor specification.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	IPMI	Graphics
ASMB-585G2-00A1E	C236	DDR4 ECC/Non-ECC	2	-	Intel HD Graphics
ASMB-585G4-00A1E	C236	DDR4 ECC/Non-ECC	4	-	Intel HD Graphics

Packing List

Part Number	Description	Quantity
2061058502	Driver CD	x 1
2001058502	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
19Z0000996T010	I/O shield	x 1

Optional Accessories

Part Number	Description
1960049408N001	LGA 1151 CPU heatsink for 1U chassis
1960052651N021	LGA 1151 CPU cooler for 2U/4U chassis
19Z0001156T010	1U IO bracket for ASMB-585
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
1700026254-01	Dual port RS-232 cable (45cm) for COM3_4 & COM5_6 connectors
1700019268-11	Cable for onboard KBMS1 connector (35cm)
1960063434N000	Cable bracket for 1700019268-11
PCA-TPM-00B1E	TPM 2.0 Module by LPC
PCA-COM232-00A1E	4 ports RS-232 module connect to LPC connectors
PCA-COM485-00A1E	4 ports RS-422/485 module connect to LPC connectors

I/O View



ASMB-585G2-00A1E



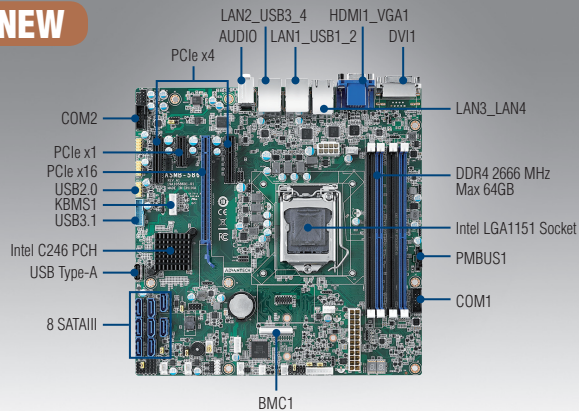
ASMB-585G4-00A1E

Note 1: Purchasing ASMB-585's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers may NOT be compatible with ASMB-585.

ASMB-586

LGA 1151 Intel® Xeon® E & 8th/9th Generation Core™ MicroATX Server Board with 4 DDR4, 4 PCIe, 6 USB 3.1, 8 SATA3, Quad/Dual LANs, IPMI

NEW



Features

- LGA 1151 Intel® Xeon® E and 8th/9th generation Core™ i7/i5/i3 processors with C246 chipset
- DDR4 ECC/Non-ECC 2666/2400/2133 MHz UDIMM up to 128GB
- One PCIe x16, two 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

Note: Supported OS including Windows 10 (64-bit) and Server 2016/2019 (64-bit) have been validated.

CE FCC

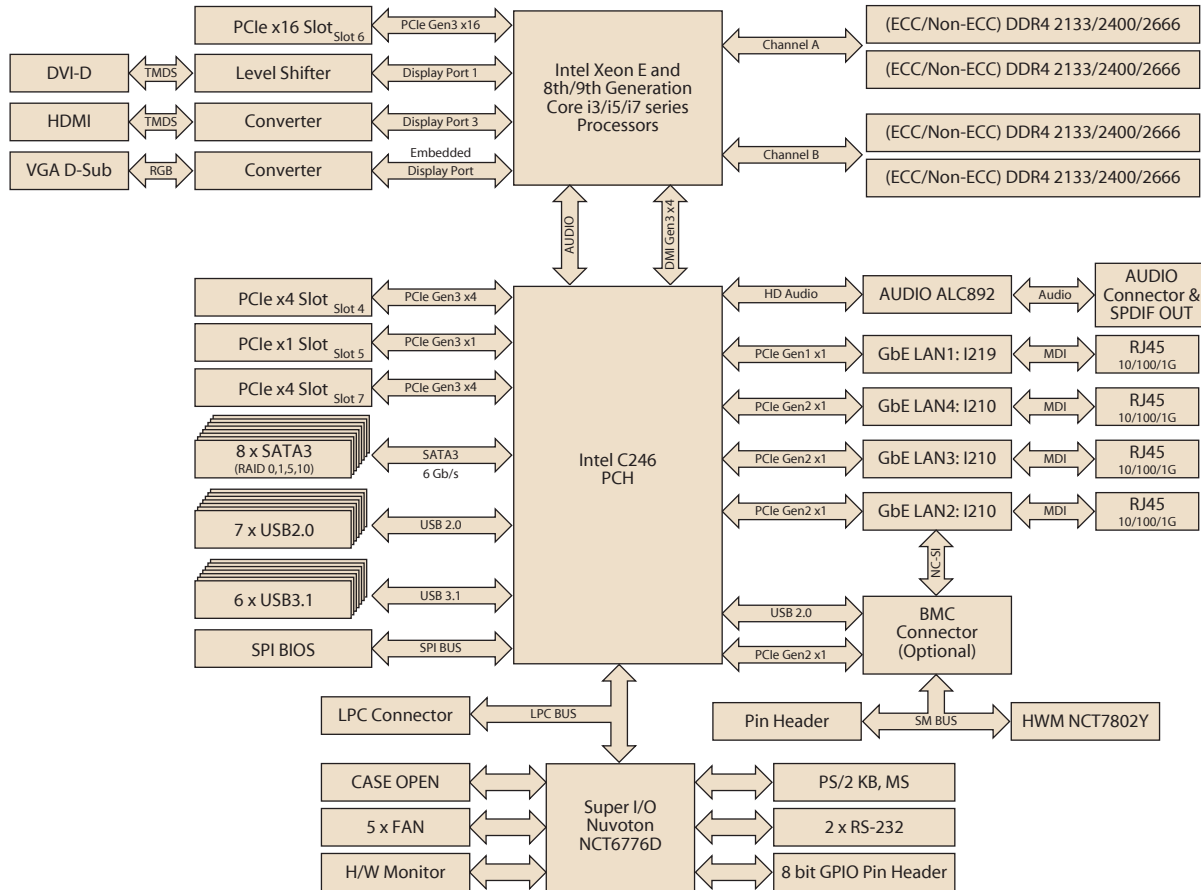
Specifications

Form Factor	Micro ATX form factor							
Processor System	Socket	Intel LGA 1151						
	CPU type	Intel® Xeon® E-21xx/E-22xx and 8th/9th 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 128 GB						
	Memory type	DDR4 ECC/Non-ECC 2666/2400/2133 MHz UDIMM (288-pin)*						
	Memory size	4 GB, 8 GB, 16 GB, 32GB						
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	Slot location 7	PCIe x4 slot (Gen3 x4 link)						
	Controller	Intel HD Graphics**						
Storage	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed						
	SATA controller	Intel C246: 8 SATA3 6Gb/s Intel Rapid Storage Technology Enterprise (for Windows only) (Supports software RAID 0, 1, 10 & 5)						
Networking	SAS controller	-						
	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	2 (RS-232)						
	Audio Header	1 (ALC 892)						
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse cable and bracket required)						
	Rear I/O Connector	External serial port	- (via COM cable in the package)					
		External USB port	4 (USB 3.1 Gen 2)					
		VGA port	1 (Resolution up to 1920 x 1200 @ 60 Hz)					
DVI port		1 (Resolution up to 1920 x 1200 @ 60 Hz)						
HDMI		1 (Resolution up to 4096 x 2160 @ 60 Hz)						
RJ-45		4						
PS/2 KB/mouse		-						
Audio		2 (Mic-in , Line-out)						
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	
	(Xeon E-2176G 3.7GHz DDR4 2400 4G*4)	3.87A	4.11A	0.63A	6.28A	0.09A	0.238A	
Environment	Operating Temperature	0 ~ 60° C, depends on CPU speed and cooler solution				Non-operating -40 ~ 85° C		
	Humidity	0% ~ 95%				5% ~ 95% (Non condensing)		
	Dimensions	244 x 244 mm (9.6" x 9.6")						

* ECC will not be supported when paired with Core i5/i7 processors.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	LAN	SATAIII	IPMI
ASMB-586G2-00A1	C246	DDR4 ECC/Non-ECC	VGA + DVI-D + HDMI	2	8	Optional
ASMB-586G4-00A1	C246	DDR4 ECC/Non-ECC	VGA + DVI-D + HDMI	4	8	Optional

Packing List

Part Number	Description	Quantity
2001058610	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700001788	COM1 cable	x 1
1960088021T001	I/O shield	x 1

Optional Accessories

Part Number	Description
1960049408N001	LGA 1151 CPU heatsink for 1U chassis
1960052651N021	LGA 1151 CPU cooler for 2U/4U chassis
1960088060T001	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



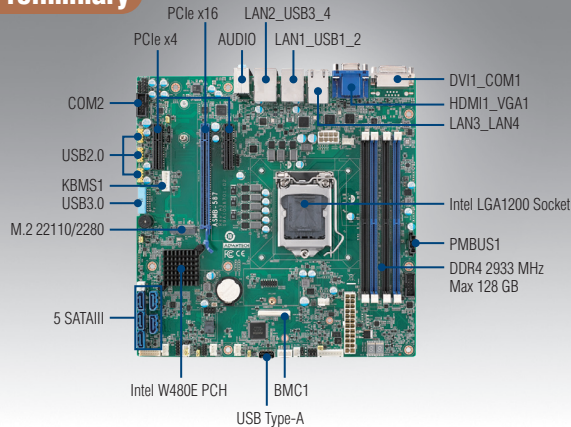
ASMB-586G2-00A1

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

ASMB-587

LGA 1200 Intel® Xeon® W & 10th Gen. Core™ MicroATX Server Board with 4 x DDR4, 3 x PCIe, 4 x USB 3.2, 5 x SATA3, Quad/Dual LANs, and IPMI

Preliminary



Features

- LGA 1200 Intel® Xeon® W and 10th Gen. Core™ i9/i7/i5/i3 processor with W480E chipset
- DDR4 ECC/Non-ECC 2933/2666/2400 MHz UDIMM up to 128 GB
- One PCIe x16 and 2 x PCIe x4 slots
- Triple displays - DVI-D, VGA, and HDMI 2.0 ports
- Five SATA 3 ports and four USB 3.2 ports
- One M.2 22110/2280 (SATA / PCIe compatible)
- 0 ~ 60 °C (32 ~ 140 °F) ambient operating temperature range

Note: Supported OS including Windows 10 (64-bit) and Server 2019 (64-bit) have been validated.



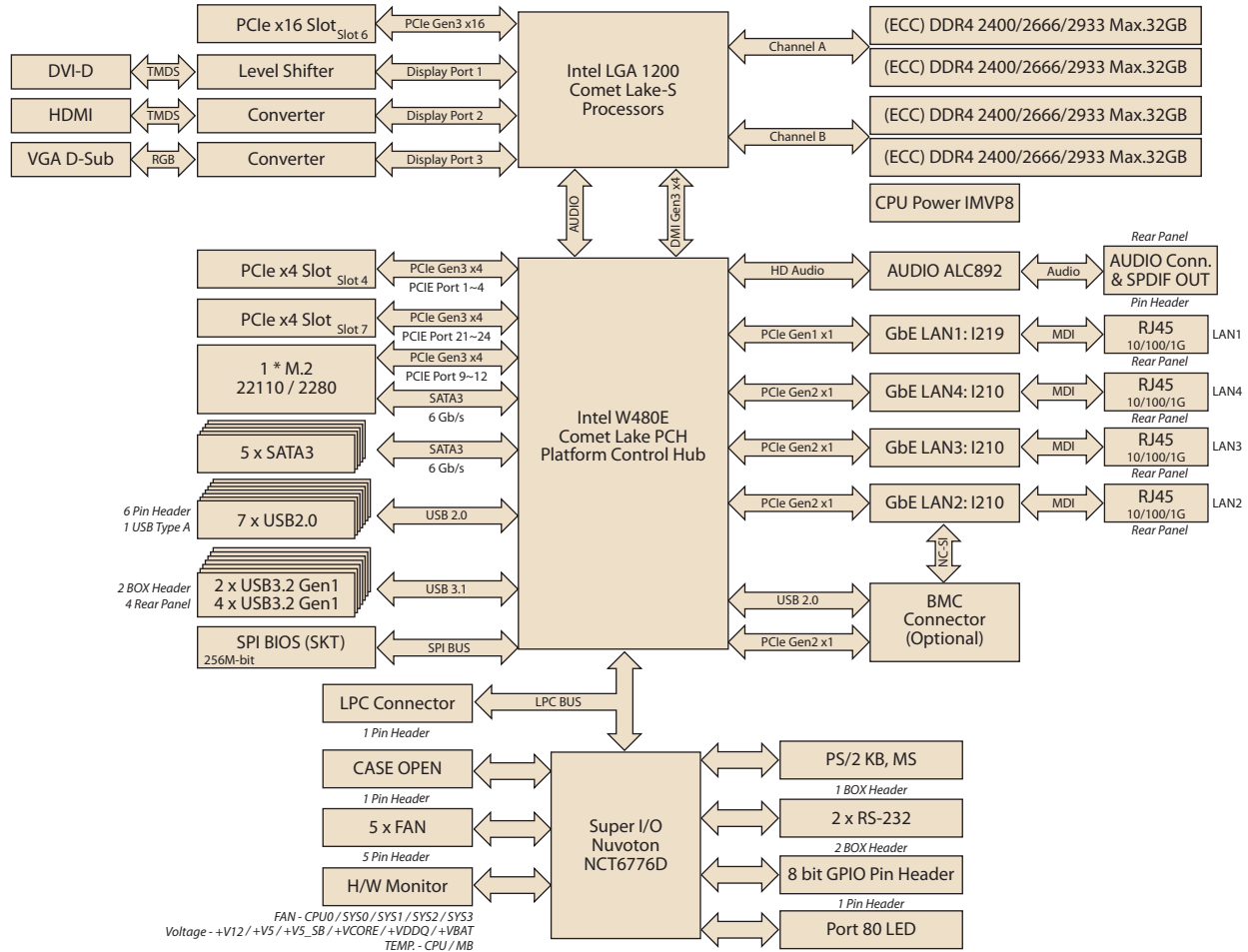
Specifications

Form Factor		Micro ATX form factor
Processor System	Socket	Intel® LGA 1200
	CPU type	Intel® Xeon® W-1270x/W-1290x and 10th Gen. Core™ i3/i5/i7/i9 series processors (TDP up to 125W)
Core Logic	Chipset	Intel® W480E chipset
Memory	Total slots	4 (Dual Channel)
	Capacity	Maximum 128 GB
	Memory type	DDR4 ECC/Non-ECC 2933/2666/2400 MHz UDIMM (288-pin)*
	Memory size	4 GB, 8 GB, 16 GB, 32GB
Expansion Slots	Total PCIe slots	3
	Slot location 1	-
	Slot location 2	-
	Slot location 3	-
	Slot location 4	PCIe x4 slot (Gen3 x4 link)
	Slot location 5	-
	Slot location 6	PCIe x16 slot (Gen3 x16 link)
Graphics	Slot location 7	PCIe x4 slot (Gen3 x4 link)
	Controller	Intel® HD Graphics**
Storage	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed
	SATA controller	Intel® W480E: 5 SATA3 6Gb/s ports with Rapid Storage Technology support (for Windows only) (Supports software RAID 0, 1, 10 & 5)
Networking	SAS controller	-
	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 x USB 3.2 Gen 1 (2 ports), 3 x USB 2.0 (6 ports), 1 x USB Type-A
	M.2	1 x M.2 22110/2280 (PCIe/SATA)
	Fan header	5 x (4-pin)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Serial port header	2 x (RS-232)
	Audio Header	1 x (ALC 892)
Rear I/O Connector	PS/2 KB/Mouse	1 x (Optional PS/2 KB/Mouse cable and bracket required)
	External serial port	- (via COM cable in the package)
	External USB port	4 x (USB 3.2 Gen 2)
	VGA port	1 x (Resolution up to 1920 x 1200 @ 60 Hz)
	DVI port	1 x (Resolution up to 1920 x 1200 @ 60 Hz)
	HDMI	1 x (Resolution up to 4096 x 2160 @ 60 Hz)
	RJ-45	4
PS/2 KB/mouse	-	
Power Requirement	Audio	2 x (Mic-in , Line-out)
	Power On	3.3 V 5 V 12 V 12V_8P 5 Vsb -12 V
Environment	(Xeon W-1290E 3.5GHz DDR4 2666 32G*4)	0.75A 1.43A 0.66A 7.08A 0.13A 0.1A
	Temperature	Operating: 0 ~ 60° C, depends on CPU speed and cooler solution Non-operating: -40 ~ 85° C
Watchdog Timer	Humidity	0% ~ 95% 5% ~ 95% (Non condensing)
	Output	System reset
Physical Characteristics	Interval	Programmable 1 ~ 255 sec/min
	Dimensions	Programmable 1 ~ 255 sec/min 244 x 244 mm (9.6 x 9.6 in)

* ECC will not be supported when paired with Core i5/i7/i9 processors.

** Some Xeon processors have no graphics support. Please check Intel® specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	LAN	SATAIII	IPMI
ASMB-587G2-00A1	W480E	DDR4 ECC/Non-ECC	VGA + DVI-D + HDMI	2	5	Optional
ASMB-587G4-00A1	W480E	DDR4 ECC/Non-ECC	VGA + DVI-D + HDMI	4	5	Optional

Packing List

Part Number	Description	Quantity
2041058700	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700001788	COM1 cable	x 1
1960088021T001	I/O shield	x 1
1700031684-01	JFP1 cable	x 1

Optional Accessories

Part Number	Description
1960049408N001	LGA 1200 CPU heatsink for 1U chassis
TBD	LGA 1200 CPU cooler for 4U chassis (CPU 125W)
1960067860N001	LGA 1200 CPU cooler for 2U/4U chassis (CPU 95W)
1960052651N021	LGA 1200 CPU cooler for 2U/4U chassis (CPU under 80W)
1960088060T001	1U I/O shield for ASMB-586/587/786/787
1700002204	Dual port USB 2.0 cable (27 cm / 10.6 in) with bracket
1700008461	Four ports USB 2.0 cable (30.5 cm / 12 in) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm / 11.8 in) with bracket
1701090401	Single port RS-232 cable (40 cm / 15.7 in) for COM2 connector
1700019268-11	Cable for onboard KBMS1 connector (35 cm / 13.7 in)
1960063434N000	Cable bracket for 1700019268-11
IPMI-1000-00A2E	IPMI 2.0 Module
PCA-COM232-00A1E	4 x ports RS-232 module connect to LPC connector
PCA-COM485-00A1E	4 x ports RS-422/485 module connect to LPC connector
PCA-TPM-00B1E	TPM 2.0 Module by LPC

I/O View



ASMB-587G4-00A1

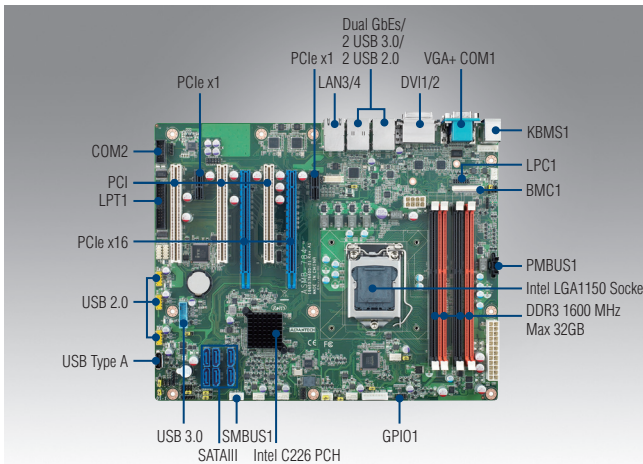


ASMB-587G2-00A1

Note: Users need to purchase ASMB-587's proprietary CPU cooler from Advantech. Other brands' CPU coolers may NOT be compatible with ASMB-587.

ASMB-784

LGA 1150 Intel® Xeon® E3 v3/ 4th Generation Core™ ATX Server Board with 2 PCIe x16 Slots (x8 link), 3 PCI, USB 3.0, Quad/Dual LANs



Features

- Supports LGA 1150 Intel® Xeon® E3-1200 v3 and 4th generation Core™ i7/i5/i3 processors
- DDR3 1600 MHz ECC/Non-ECC UDIMM up to 32GB
- One Gen 3.0 PCIe x16 link or two PCIe x16 slots with x8 link, two PCIe x1 and three PCI slots
- Rackmount optimized placement with positive air flow design
- Supports Intel vPro, AMT 9.0, IPMI (optional) and embedded software APIs and utilities



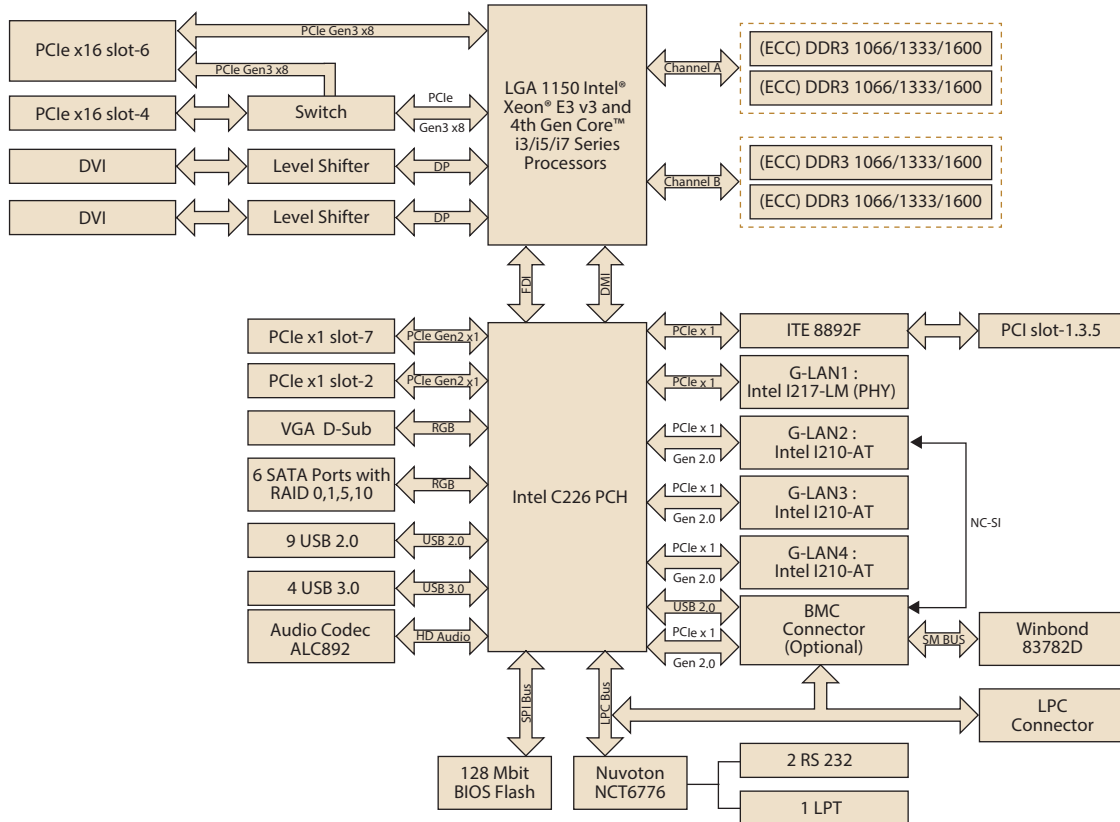
Specifications

Form Factor		ATX form factor				
Processor System	Socket	Intel LGA 1150				
	CPU type	Intel® Xeon® E3-1200 v3 and Core™ i3/i5/i7 series (TDP up to 88W)				
Core Logic	Chipset	Intel C226 chipset				
Memory	Total slots	4 (Dual Channel)				
	Max. capacity	32 GB				
	Memory type	DDR3 ECC/Non-ECC 1600/1333/1066 MHz UDIMM (240-pin)*				
	Memory size	1 GB, 2 GB, 4 GB, 8 GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	7				
	Slot location 1	PCI				
	Slot location 2	PCIe x1 slot (Gen2 x1 link)				
	Slot location 3	PCI				
	Slot location 4	PCI x16 slot (Gen3 x8 link)				
	Slot location 5	PCI				
	Slot location 6	PCI x16 slot (Gen3 x8 or x16 link)				
Graphics	Controller	Intel HD Graphics**				
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed				
Storage	SATA controller	Intel C226: 6 SATA3 6 Gb/s ports with Intel Rapid Storage Technology support (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
	SAS controller	-				
Networking	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel I217-LM; GbE LAN 2-4: Intel I210-AT				
	Connector	RJ-45 x 2 for G2 version; RJ-45 x 4 for G4 version				
Onboard I/O Connector	Printer Port connector	1				
	PSU connector	24-pin SSI power connector + 8-pin SSI 12V power connector				
	USB connector	2 USB 3.0; 7 USB 2.0 (1 x USB Type-A)				
	Fan header	5 (4-pin)				
	SMBus	2				
	Chassis intruder	1				
	Front LAN LED	2				
	Serial port header	1 (RS-232)				
	Audio Connector	1 (ALC 892)				
	PS/2 KB/Mouse	1				
Rear I/O Connector	External serial port	1				
	External USB port	4 (2 USB 3.0 and 2 USB 2.0)				
	VGA port	1				
	DVI	2				
	Display Port	-				
	RJ-45	2 for G2 version. 4 for G4 version				
Watchdog Timer	Output	System reset				
	Interval	Programmable 1 ~ 255 sec				
	Power On	Intel® Xeon® E3-1275v3 3.5GHz; DDR3 8G x4				
Power Requirement	3.3 V	5 V	12 V	12V_8P	5 Vsb	-12 V
	1.17A	2.30A	0.06A	4.33A	0.16A	0.01A
Environment	Operating		Non-operating			
	Temperature	0 ~ 60 °C (32 ~ 140 °F)	-40 ~ 85 °C (-40 ~ 185 °F)			
	Humidity	0% ~ 95%	5% ~ 95% (Non-condensing)			
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")				

* ECC memory support or not depends on Intel processor specification.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	LAN	USB 3.0	DVI	SATAIII	IPMI
ASMB-784G2-00A1E	C226	2	4	2	6	Optional
ASMB-784G4-00A1E	C226	4	4	2	6	Optional

Packing List

Part Number	Description	Quantity
2066S78402	Driver CD	x 1
2006S78410	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
19Z0000502T000	I/O shield	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960052651N021	LGA 1151/1150/1155 CPU cooler for 2U/4U and wallmount chassis
1960049408N001	LGA 1151/1150/1155 1U CPU Cooler
19Z0000747T000	1U I/O shield
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	COM port cable with bracket (40 cm)
1700020277-01	Dual port USB 3.0 cable with bracket (30 cm)
1700007351	SATA cable L-type (for ACP-4320)
AI8B-AUDIO-HDA1E	HD Audio-Card
IPMI-1000-00A2E	IPMI 2.0 Module
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

I/O View



ASMB-784G2-00A1E



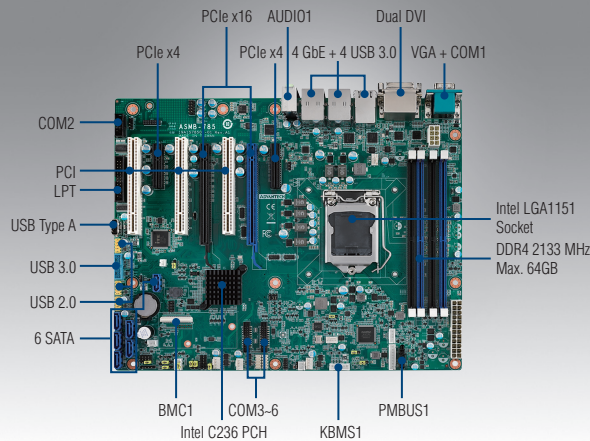
ASMB-784G4-00A1E

Note 1: To enable Intel vPro feature, PCA-TPM-00A1E must be installed.

Note 2: Purchasing ASMB-784's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-784.

ASMB-785

LGA 1151 Intel® Xeon® E3 v5/v6 & 6th/7th Generation Core™ ATX Server Board with 4 DDR4, 4 PCIe, 3 PCI, 6 USB 3.0, 6 COM, 6 SATA3, Quad/Dual LANs, IPMI



Features

- Supports LGA 1151 Intel® Xeon® E3-1200 v5/v6 and 6th/7th Generation Core™ i7/i5/i3 processors
- DDR4 2400/2133/1866/1600/1333 MHz ECC/Non-ECC UDIMM up to 64 GB
- One Gen 3.0 PCIe x16 link (or two PCIe x16 slots with x8 link), two PCIe x4, and three PCI slots
- Triple display - two DVI-D and one VGA ports
- Supports up to ten RS-232 or six RS-232 and four RS-422/485 ports
- Rackmount optimized placement with positive air flow design
- 0 ~ 60 °C ambient operation temperature range

Note: Intel Xeon E3 v6 & 7th Core processors only support Windows 10 (64-bit) and Server 2016 (64-bit).



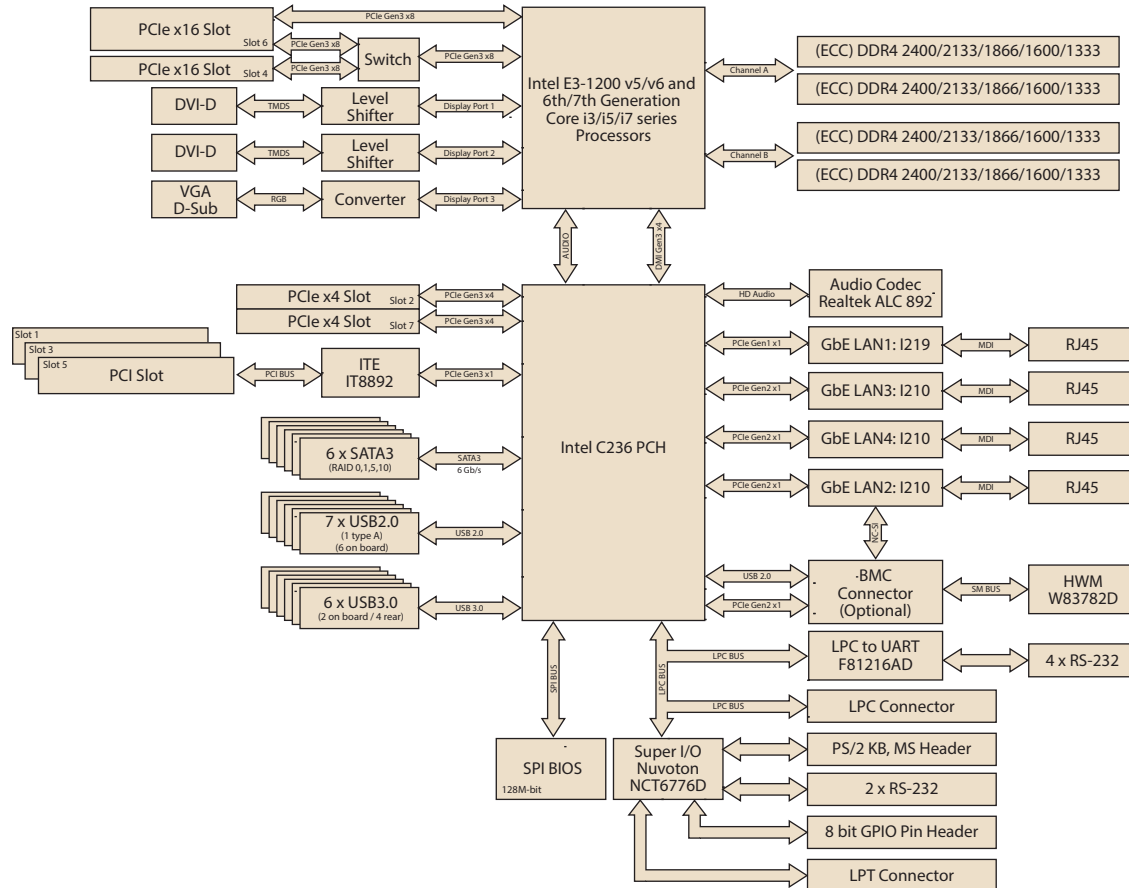
Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 1151
	CPU type	Intel® Xeon® E3-1200 v5/v6 and 6th/7th Generation Core™ i3/i5/i7 series (TDP up to 91W)
Core Logic	Intel C236 chipset	
Memory	Total slots	4 (Dual Channel)
	Max. capacity	64 GB
	Memory type	DDR4 ECC/Non-ECC 2400/2133/1866/1600 MHz UDIMM (288-pin)*
	Memory size	4 GB, 8 GB, 16 GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCI
	Slot location 2	PCIe x4 slot (Gen3 x4 link)
	Slot location 3	PCI
	Slot location 4	PCIe x16 slot (Gen3 x8 link)
	Slot location 5	PCI
	Slot location 6	PCIe x16 slot (Gen3 x8 or x16 link)
Graphics	Controller	Intel HD Graphics**
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed
Storage	SATA controller	Intel C236: 6 SATA3 6 Gb/s ports with Intel Rapid Storage Technology support (for Windows only) (Supports software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	Interface	10/100/1000 Mbps
	Controller	GbE LAN1: Intel I219; GbE LAN 2-4: Intel I210-AT
	Connector	RJ-45 x 2 for G2 version; RJ-45 x 4 for G4 version
Onboard I/O Connector	Printer Port connector	1
	PSU connector	24-pin SSI power connector + 8-pin SSI 12V power connector
	USB connector	1 USB 3.0 (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	2 (support 4 RS-232 ports) + 1 (support 1 RS-232 port)
	Audio connector	1 (ALC 892)
	PS/2 KB/Mouse	1
Rear I/O Connector	External serial port	1
	External USB port	4 (USB 3.0)
	VGA port	1
	DVI	2
	Display port	-
	RJ-45	2 for G2 version; 4 for G4 version
	Audio connector	2 (Mic-in, Line-out)
	PS/2 KB/Mouse	-
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec
Power Requirement	Power On	Intel® Xeon® E3-1275 v5 3.60GHz; DDR4 8G x 4
		3.3 V 5 V 12 V 12V_8P 5 Vsb -12 V
		0.96A 1.58A 0.32A 7.21A 0.11A 0.06A
Environment		Operating Non-operating
	Temperature	0 ~ 60 °C (32 ~ 140 °F) -40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	Depends on CPU speed and cooler solution 10 ~ 95% (Non-condensing)
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")

* ECC memory support or not depends on Intel processor specification.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	USB 3.0	DVI	SATAIII	IPMI
ASMB-785G2-00A1E	C236	DDR4 Non-ECC/ECC UDIMM	2	6	2	6	Optional
ASMB-785G4-00A1E	C236	DDR4 Non-ECC/ECC UDIMM	4	6	2	6	Optional

Packing List

Part Number	Description	Quantity
2061S78502	Driver CD	x 1
2006S78510	Startup manual	x 1
1700003194	SATA data cables	x 1
1700019381	SATA data cable (right angle)	x 1
1700022749-11	SATA power cables	x 2
19Z0000996T010	I/O shield	x 1

Optional Accessories

Part Number	Description
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1960052651N021	LGA 1151/1150/1155 CPU cooler for 2U/4U and wallmount chassis
1960049408N001	LGA 1151/1150/1155 CPU heatsink for 1U chassis
19Z0001156T010	1U I/O shield
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	Single port RS-232 cable with bracket (40 cm)
1700008762	Dual port RS-232 cable with bracket (22.5 cm)
1700026254-01	Dual port RS-232 cable for COM3_4 & COM5_6 connector (45cm)
1700020277-01	Dual port USB 3.0 cable with bracket (30 cm)
1700019268-11	Keyboard & mouse cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
PCA-COM232-00A1E	4 ports RS-232 module to LPC connector
PCA-COM485-00A1E	4 ports RS-485 module to LPC connector
IPMI-1000-00A2E	IPMI 2.0 Module
PCA-TPM-00B1E	TPM 2.0 Module by LPC

I/O View



ASMB-785G2-00A1E



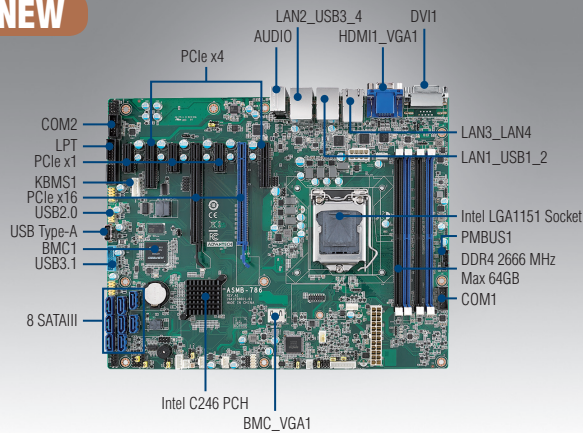
ASMB-785G4-00A1E

Note 1: Purchasing ASMB-785's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-785.
 Note 2: COM module or TPM module can be installed when the slot-2 & 3 are not occupied.

ASMB-786

LGA 1151 Intel® Xeon® E & 8th/9th Generation Core™ ATX Server Board with 4 DDR4, 7 PCIe, 6 USB 3.1, 8 SATA3, Quad/Dual LANs, IPMI

NEW



Features

- LGA 1151 Intel® Xeon® E & 8th/9th Generation Core™ i7/i5/i3 processors with C246 chipset
- DDR4 2666/2400/2133 MHz ECC/Non-ECC UDIMM up to 128 GB
- One Gen 3.0 PCIe x16 link (or two PCIe x16 slots with x8 link), two PCIe x4, and three PCIe x1 slots
- Triple displays - DVI-D, VGA and HDMI 2.0 ports
- Eight SATA3 ports and six USB 3.1 ports
- Rackmount optimized placement with positive air flow design
- 0 ~ 60° C ambient operating temperature range

Note: Supported OS including Windows 10 (64-bit) and Server 2016/2019 (64-bit) have been validated.

CE FCC

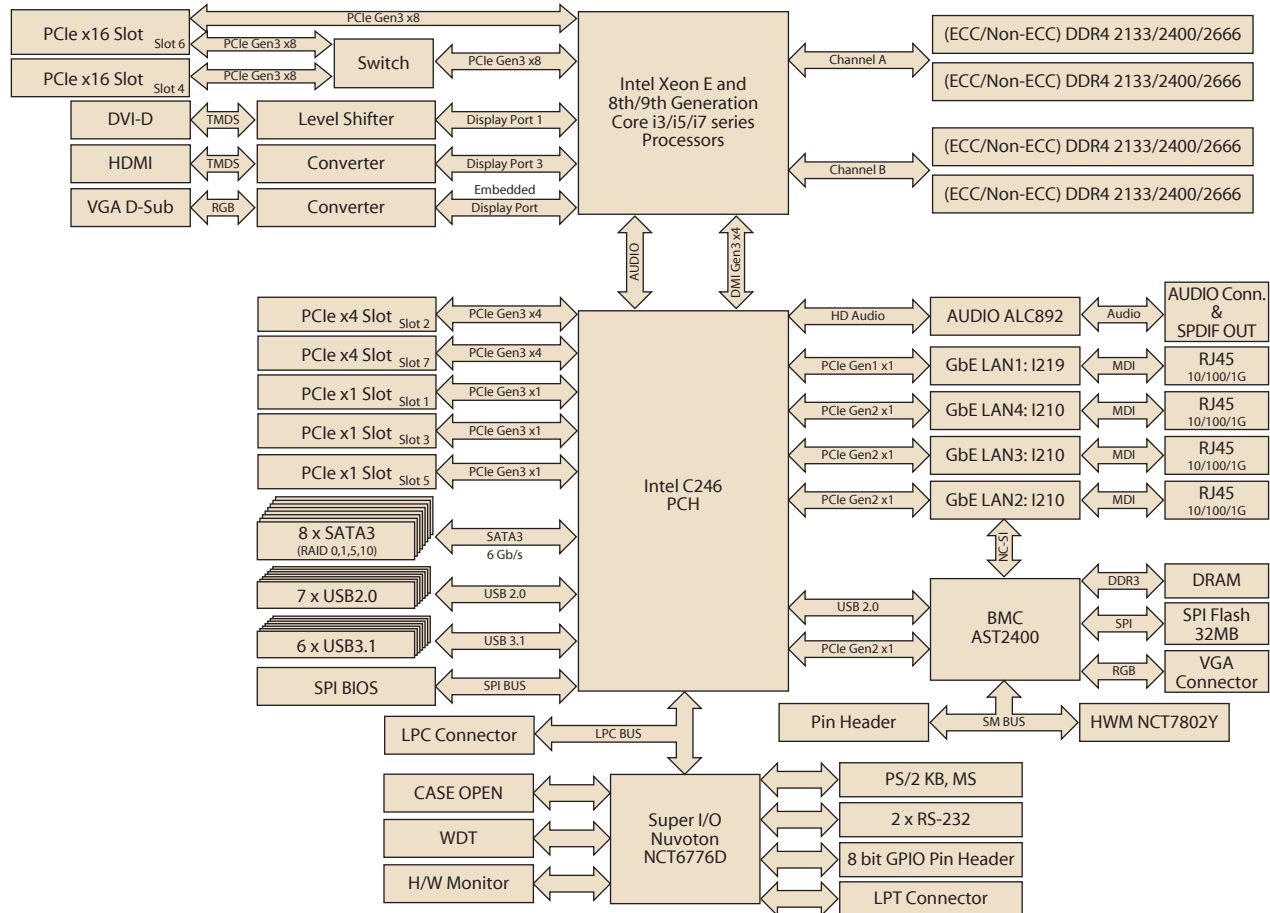
Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 1151
	CPU type	Intel® Xeon® E-21xx/E-22xx and 8th/9th Generation Core™ i3/i5/i7 series (TDP up to 95W)
Core Logic	Chipset	Intel C246 chipset
Memory	Total slots	4 (Dual Channel)
	Max. capacity	128 GB
	Memory type	DDR4 ECC/Non-ECC 2666/2400/2133 MHz UDIMM (288-pin)*
	Memory size	4 GB, 8 GB, 16 GB, 32GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x1
	Slot location 2	PCIe x4 slot (Gen3 x4 link)
	Slot location 3	PCIe x1
	Slot location 4	PCIe x16 slot (Gen3 x8 link)
	Slot location 5	PCIe x1
	Slot location 6	PCIe x16 slot (Gen3 x8 or x16 link)
Graphics	Controller	Intel HD Graphics**
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed
Storage	SATA controller	Intel C246: 8 SATA3 6 Gb/s ports with Intel Rapid Storage Technology Enterprise support (for Windows only) (Supports software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	Interface	10/100/1000 Mbps
	Controller	GbE LAN1: Intel I219; GbE LAN 2-4: Intel I210-AT
	Connector	RJ-45 x 2 for G2 version; RJ-45 x 4 for G4 version
Onboard I/O Connector	Printer Port connector	1
	PSU connector	24-pin SSI power connector + 8-pin SSI 12V 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	2 (RS-232)
	Audio connector	1 (ALC 892)
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse cable and bracket required)
Rear I/O Connector	External serial port	- (via COM cable in the package)
	External USB port	4 (USB 3.1 Gen 2)
	VGA port	1 (Resolution up to 1920 x 1200 @ 60 Hz)
	DVI port	1 (Resolution up to 1920 x 1200 @ 60 Hz)
	HDMI port	1 (Resolution up to 4096 x 2160 @ 60 Hz)
	RJ-45	2 for G2 version; 4 for G4 version
	Audio connector	2 (Mic-in, Line-out)
	PS/2 KB/Mouse	-
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec
Power Requirement	Power On	3.3 V 5 V 12 V 12V_8P 5 Vsb -12 V
	(Xeon E-2176G 3.7GHz DDR4 2400 4G*4)	3.44A 2.61A 1.04A 6.3A 0.09A -0.02A
Environment	Operating	Non-operating
	Temperature	0 ~ 60° C (32 ~ 140° F) -40 ~ 85° C (-40 ~ 185° F)
	Humidity	Depends on CPU speed and cooler solution 10 ~ 95% (Non-condensing)
Physical Characteristics	Dimensions	304.8 x 244 mm (12" x 9.6")

* ECC will not be supported when paired with Core i5/i7 processors.

** Some Xeon processors have no graphic support. Please check Intel specification for processor graphics availability.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	LAN	SATAIII	IPMI
ASMB-786G2-00A1	C246	DDR4 Non-ECC/ECC UDIMM	VGA + DVI-D + HDMI	2	8	-
ASMB-786G4-00A1	C246	DDR4 Non-ECC/ECC UDIMM	VGA + DVI-D + HDMI	4	8	Y

Packing List

Part Number	Description	Quantity
2001S78610	Startup manual	x 1
1700003194	SATA data cables	x 1
1700019381	SATA data cable (right angle)	x 1
1700022749-11	SATA power cables	x 2
1700001788	COM1 cable	x 1
1960088021T001	I/O shield	x 1

Optional Accessories

Part Number	Description
1960052651N021	LGA 1151/1150/1155 CPU cooler for 2U/4U and wallmount chassis
1960049408N001	LGA 1151/1150/1155 CPU heatsink for 1U chassis
1960088060T001	1U I/O shield
1700008809	Printer port cable kit (25 cm)
1700020294-01	Printer port cable kit (42 cm)
1701090401	Single port RS-232 cable with bracket (40 cm)
1700002204	Dual port USB 2.0 cable (27 cm) with bracket
1700008461	Four port USB 2.0 cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable with bracket (30 cm)
1700019268-11	Cable for onboard KBMS1 connector (35cm)
1960063434N000	Cable bracket for 1700019268-11
1700029038-01	BMC VGA cable with bracket (35cm, for G4 SKU)
PCA-COM232-00A1E	4 ports RS-232 module to LPC connector
PCA-COM485-00A1E	4 ports RS-485 module to LPC connector
PCA-TPM-00B1E	TPM 2.0 Module by LPC

I/O View



ASMB-786G4-00A1



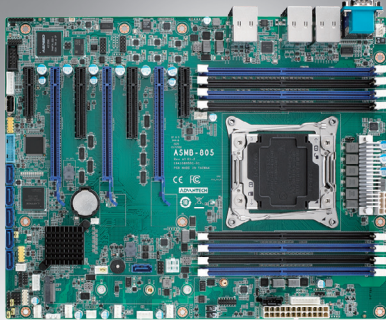
ASMB-786G2-00A1

Note : Purchasing ASMB-786's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-786.

ASMB-805

**LGA 2066 Intel® Xeon® W Workstation
Motherboard with 8 DDR4, 3 PCIe x16,
6 SATA3, 8 USB3.0, IPMI**

NEW



Features

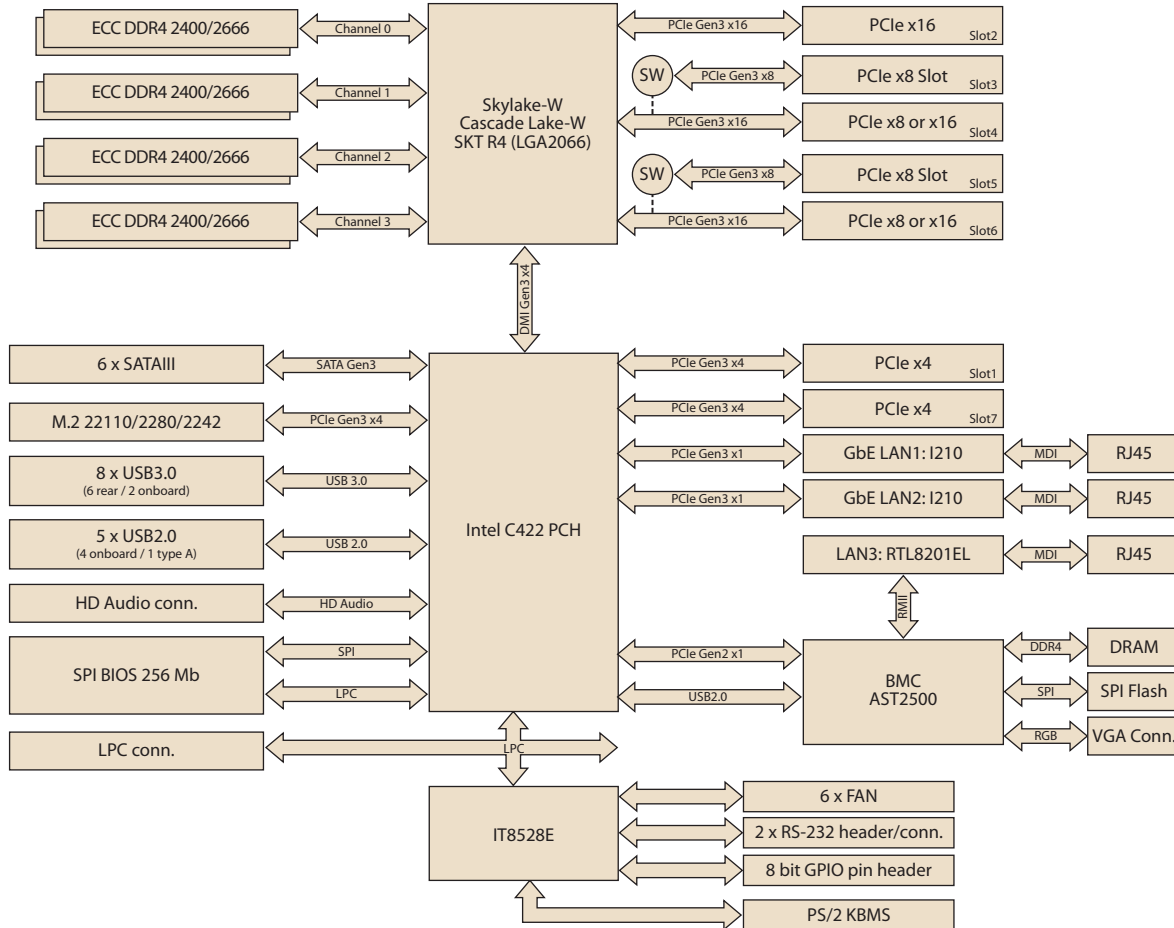
- ATX workstation motherboard with Xeon® W-2100 and W-2200 processors
- DDR4 2666 MHz RDIMM up to 512 GB
- Three PCIe x16 (or one x16 and four x8)
- Workstation 1S up to 4.00 GHz
- Six SATA3 and one M.2 22110/2280/2242 connectors (PCIe)
- 0 ~ 60 °C ambient operating temperature range

CE FCC

Specifications

Form Factor	ATX form factor		
Processor System	Socket	Intel LGA 2066	
	CPU type	Intel Xeon W-2100 and W-2200 (CPU cooler should be purchased separately and TDP up to 165W)	
Core Logic	Chipset	Intel C422 chipset	
	Total slots	8 (2 DIMM per channel)	
Memory	Capacity	Maximum 256GB ECC RDIMM Maximum 512GB ECC LRDIMM	
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM	
	Memory size	4 GB, 8 GB, 16 GB, 32 GB (RDIMM), 64 GB (LRDIMM)	
Expansion Slots	Total PCI/PCI-X/PCIe slots	7	
	Slot location 1	PCIe x4 slot (x4 link), signal from PCH	
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU	
	Slot location 3	PCIe x8 slot (0 or x8 link), signal from CPU	
	Slot location 4	PCIe x16 slot (x8 or x16 link), signal from CPU	
	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	
Graphics	VGA	Aspeed AST 2500 (Optional)	
	Storage	SATA controller Intel C422: 6 x SATA3 (600 MB/s) support software RAID 0,1,5,10 SAS controller -	
Networking	GbE LAN	2 x Intel I210AT	
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 1 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector	
	USB connector	4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard header) + 1 x Type-A USB2.0 port	
	Fan header	6 x 4-pin (5 for system + 1 for CPU)	
	M.2	1 x M.2 22110/2280/2242 B+M key (PCIe)	
	SMBus	1	
	Chassis intruder	1	
	Front LAN LED	1	
	Audio Header	1	
	PS/2 KB/Mouse	1	
Rear I/O Connector	Serial port header	1	
	External serial port	1	
	External USB port	6 (USB3.0)	
	VGA port	1 (Optional)	
	RJ-45	3 (1 port dedicated for IPMI function)	
	PS/2 KB/mouse	-	
Management Solution	Infiniband	-	
	Software	-	
Watchdog Timer	Out of band remote management	Optional	
	Output	System reset	
Power Requirement	Interval	Programmable 1 ~ 255 sec	
	Power On	3.3V 5V 12V 5Vsb -12V 12V_8P	
	(165W CPU@3.4GHz DDR4 2400 32GB*8)	0.88A 0.43A 0.65A 0.05A 0A 12.74A	
	Environment	Operating	Non-operating
		Temperature	0 ~ 60 °C, depends on CPU speed and cooler solution -40 ~ 85 °C
	Physical Characteristics	Humidity	10% ~ 95%
		Dimension (L x H)	304.8 x 244 mm (12" x 9.6")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE	IPMI	Graphics
ASMB-805-00A1	C422	DDR4 RDIMM	2	-	-
ASMB-805I-00A1	C422	DDR4 RDIMM	2	Yes	AST2500

Packing List

Part Number	Description	Quantity
2041080500	Startup manual	x 1
1700003194	SATA data cables	x 1
1700019381	SATA data cable (right angle)	x 1
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 1
1930005673-11	Screw for M.2 device	x 1
1960076488T000	I/O shield	x 1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960055362N001	LGA2066 square CPU cooler for 2U/4U chassis (145W)
1960065684N011	LGA2066 square CPU cooler for 4U chassis (165W)
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
1701090401	COM port cable (40 cm) with bracket
1700019268-11	PS/2 port cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
PCA-COM232-00A1E	4 ports RS-232 module
PCA-COM485-00A1E	4 ports RS-422/485 module

I/O View



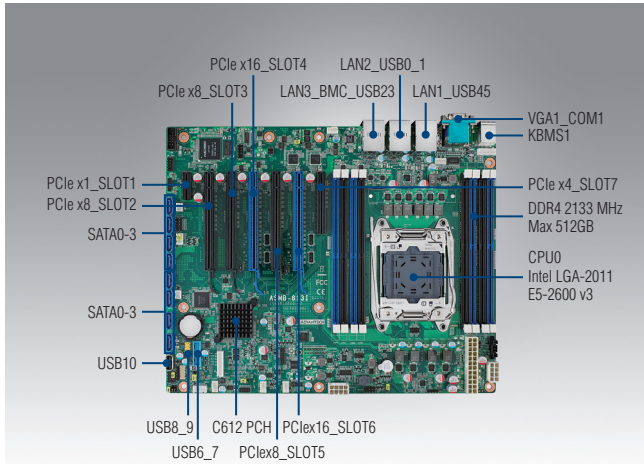
ASMB-805I-00A1



ASMB-805-00A1

ASMB-813

**LGA 2011-R3 Intel® Xeon® E5-2600 v3/v4
ATX Server Board with 8 DDR4 DIMM,
5 PCIe x16 Slot, 6 USB 3.0, IPMI**



Features

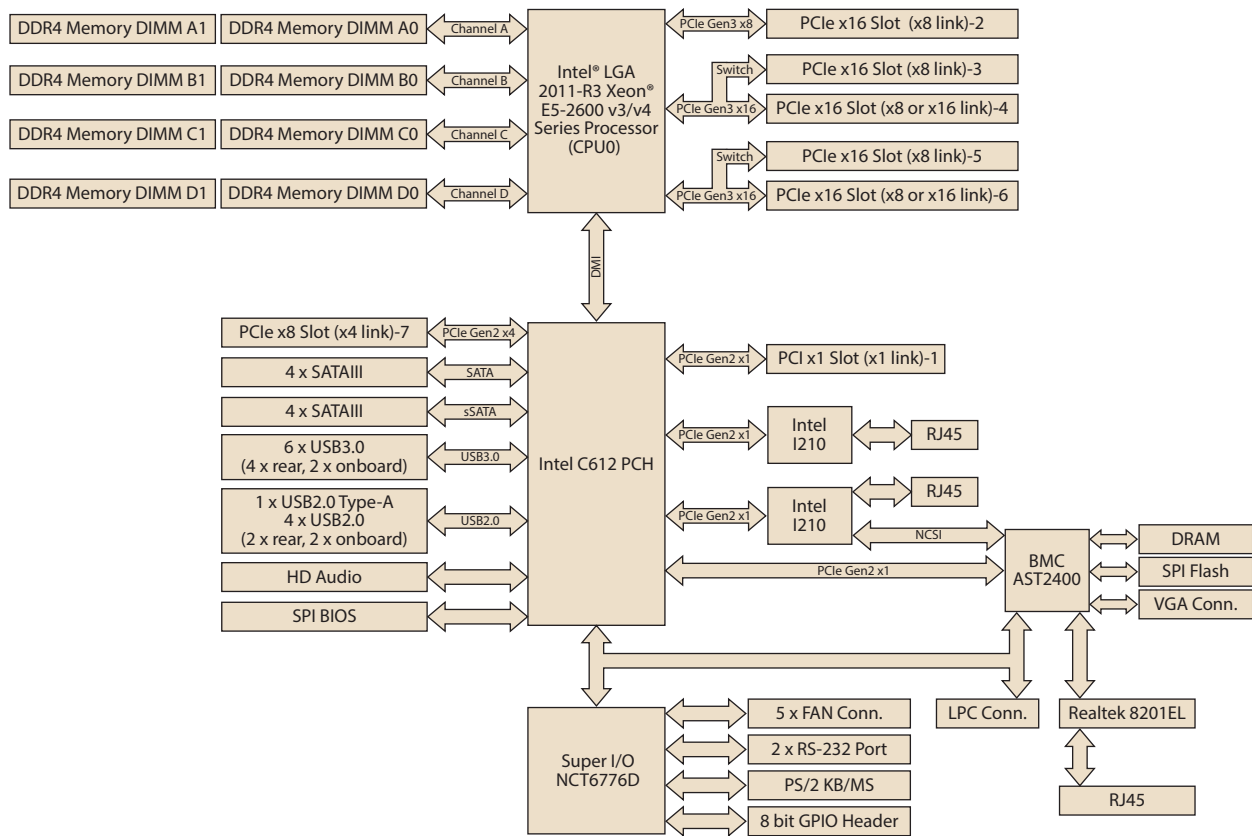
- ATX Server Board with Intel® Xeon® E5-2600 v3/v4 processor
- Eight DDR4 2400 MHz RDIMM up to 256 GB and support DDR4 NVDIMM
- Seven PCIe expansion slots: five PCIe x8 (or two x16 and one x8), one PCIe x4 and one PCIe x1
- 0 ~ 60 °C ambient operating temperature range



Specifications

Form Factor		ATX form factor
Processor System	Socket	Intel LGA 2011-R3
	CPU type	Intel® Xeon® E5-2600 v3/v4 Series (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series Intel® Core™ i7 6850K/6900K/6950X
Core Logic	Chipset	Intel C612 chipset
Memory	Total slots	8 (Quad Channel)
	Capacity	Maximum 256 GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2400/2133/1866/1600 MHz DIMM and NVDIMM (working with Xeon E5) DDR4 ECC/Non-ECC 2400/2133/1866/1600 MHz UDIMM (working with Core i7 only)
	Memory size	4 GB, 8 GB, 16 GB, 32 GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x1 slot (Gen2 x1 link), signal from PCH
	Slot location 2	PCIe x16 slot (Gen3 x8 link)
	Slot location 3	PCIe x16 slot (Gen3 x8 link)
	Slot location 4	PCIe x16 slot (Gen3 x16 link or x8 link when Slot 3 is occupied)
	Slot location 5	PCIe x16 slot (Gen3 x8 link)
	Slot location 6	PCIe x16 slot (Gen3 x16 link or x8 link when Slot 5 is occupied)
Graphics	Slot location 7	PCIe x8 slot (Gen2 x4 link), signal from PCH
	VGA	Aspeed AST2400/1400 64 MB
Storage	IDE controller	-
	SATA controller	Intel C612: 8 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA3 and sSATA0-sSATA3 support software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	GbE LAN	2 x Intel I210AT
Onboard I/O Connector	LPC connector	1
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector
	USB connector	2 (supports 2 x USB3.0 ports and 2 x USB2.0 ports) + 1 x Type-A
	Fan header	5 x 4-pin
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Audio Header	1
	Serial port header	1
	Rear I/O Connector	External serial port
External USB port		6 (4 x USB3.0 + 2 x USB2.0)
VGA port		1
RJ-45		3 (1 port dedicated for IPMI function)
PS/2 KB/mouse		1
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-813I SKU only)
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
	120W CPU@2.5GHz DDR4 2133 4GB x8	1.53A 0.92A 12.21A 0.04A 0.04A
Environment	Operating	Non-operating
	Temperature	0 ~ 60 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95%
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	Graphics
ASMB-813-00A1E	C612	8 x DDR4 RDIMM	2	-	AST 1400
ASMB-813I-00A1E	C612	8 x DDR4 RDIMM	2	Yes	AST 2400

Packing List

Part Number	Description	Quantity
2061813101	Driver CD	x 1
2001813110	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable(8P)	x 2
1960048321T020	I/O shield	x 1

Optional Accessories

Part Number	Description
ASMB-RF3X8-21A1E	2U Riser Card (2 x PCI-X + 1 x PCIe x8)
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960065593N001	LGA-2011 CPU heatsink narrow type for 1U chassis (TDP up to 130W)
1960063011N001	LGA-2011 CPU cooler narrow type for 2U/4U chassis (TDP up to 160W)
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1701090401	COM port cable with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
19Z0000811N000	1U chassis IO shield
968EMLSAP2	SUSIAccess Pro 3.0

I/O View



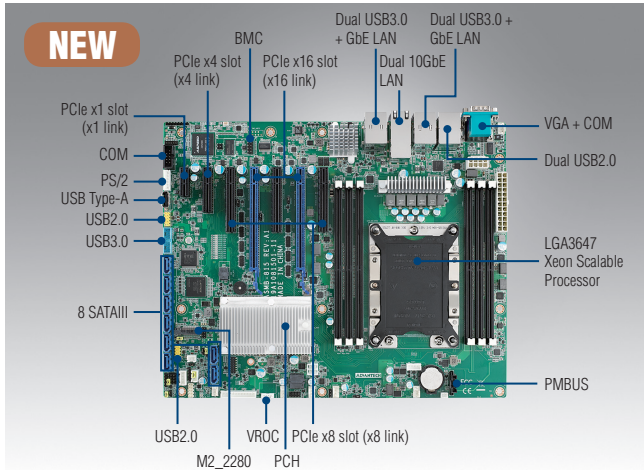
ASMB-813-00A1E



ASMB-813I-00A1E

ASMB-815

LGA 3647-PO Intel® Xeon® Scalable ATX Server Board with 6 DDR4, 5 PCIe x8 or 2 PCIe x16 and 1 PCIe x8, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI



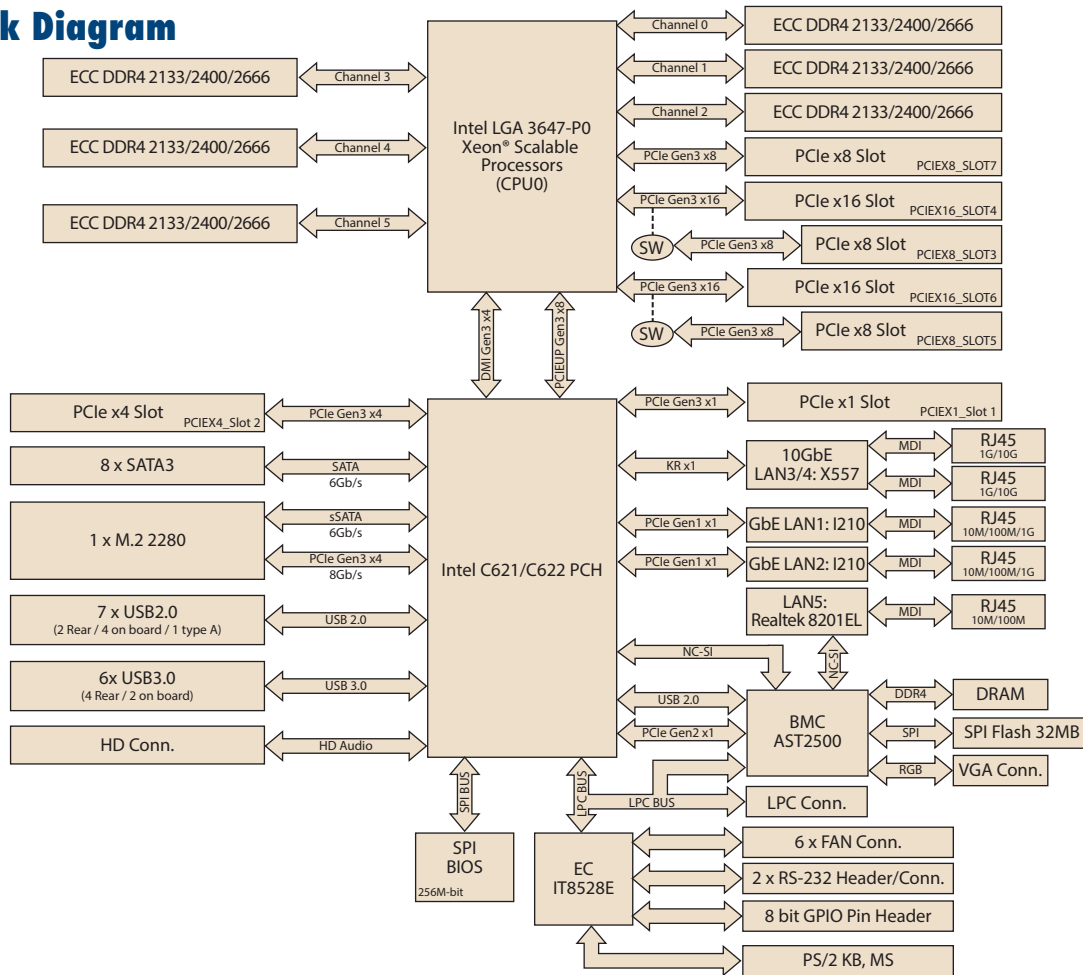
Features

- ATX server board with Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 384 GB (6 LRDIMMs), support Apache Pass
- Five PCIe x8 or two PCIe x16 and 1 PCIe x8
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 60 °C ambient operating temperature range

Specifications

Form Factor	ATX form factor	
Processor System	Socket	Intel LGA 3647-PO
	CPU type	Intel Xeon Scalable processors (CPU cooler should be purchased separately and TDP up to 205W)
Core Logic	Chipset	Intel C621/C622 chipset
Memory	Total slots	6 (1 DIMM per channel)
	Capacity	Maximum 384GB ECC LRDIMM Maximum 192GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x1 slot (x1 link), signal from PCH
	Slot location 2	PCIe x4 slot (x4 link), signal from PCH
	Slot location 3	PCIe x8 slot (0 or x8 link), signal from CPU
	Slot location 4	PCIe x16 slot (x8 or x16 link), signal from CPU
	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
Slot location 7	PCIe x8 slot (x8 link), signal from CPU	
Graphics	VGA	Aspeed AST 2500/2510
Storage	SATA controller	Intel C621/C622: 8 x SATA3 (600 MB/s) support software RAID 0,1,5,10
	SAS controller	-
Networking	GbE/10GbE LAN	2 x Intel I210AT / Intel X557-AT2 (dual 10GbE ports)
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 1 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector
	USB connector	4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard header) + 1 x Type-A USB2.0 port
	Fan header	6 x 4-pin (5 for system + 1 for CPU)
	M.2	1 x M.2 2280 B+M key (SATA and PCIe)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	1
	Audio Header	1
Rear I/O Connector	PS/2 KB/Mouse	1
	Serial port header	1
	External serial port	1
	External USB port	4 (USB3.0) + 2 USB (2.0)
	VGA port	1
	RJ-45	5 (1 port dedicated for IPMI function)
	PS/2 KB/mouse	-
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-8151 & ASMB-815T2 SKUs)
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@2.5GHz DDR4 2400 4G*6)	2.77127A 7.00549A 0.57829A 0.132880A 0.063951A 17.5801A
Environment	Operating	Non-operating
	Temperature	0 ~ 60 °C, depends on CPU speed and cooler solution -40 ~ 85 °C
	Humidity	10% ~ 95% 10% ~ 95% (Non condensing)
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-815-00A1E	C621	DDR4 RDIMM	2/-	-	AST 2510
ASMB-815I-00A1E	C621	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-815T2-00A1E	C622	DDR4 RDIMM	2/2	Yes	AST 2500

Packing List

Part Number	Description	Quantity
2066815I00	Driver CD	x 1
2006815I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 2
1960076488T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960081155N001	LGA-3647 narrow CPU cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1960081603N101	LGA-3647 narrow CPU cooler for 4U chassis (205W)
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
1701090401	COM port cable (40 cm) with bracket
1700019268-11	PS/2 port cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
1960082347T000	For 1U chassis IO shield

I/O View



ASMB-815T2-00A1E



ASMB-815I-00A1E

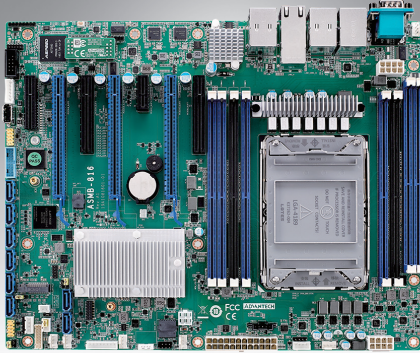


ASMB-815-00A1E

ASMB-816

LGA 4189 Intel® Xeon® Scalable ATX Server Board with 8x DDR4, 3x PCIe x16, 8x SATA 3, 6x USB 3.0, Dual 10GbE, and IPMI

Preliminary



Features

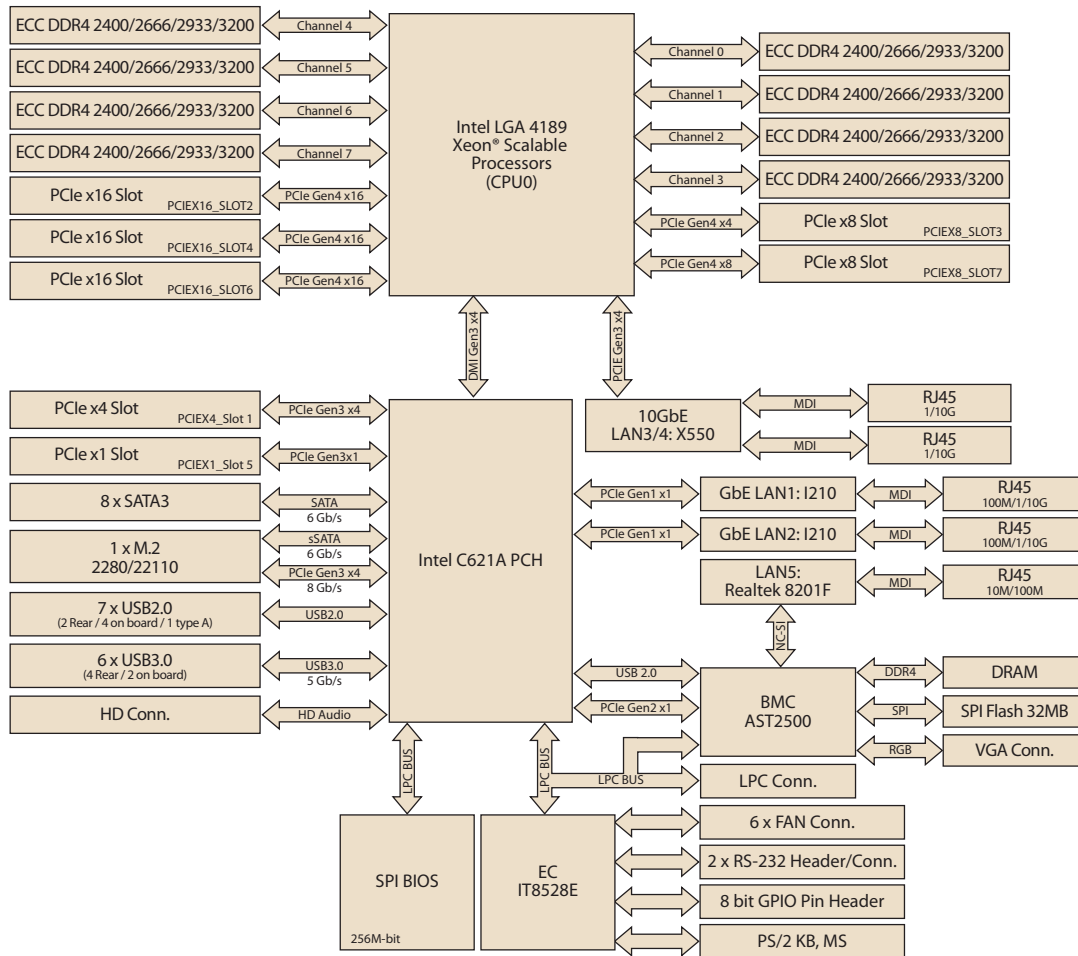
- LGA4189 (Socket P+) ATX server board with 3rd Gen. Xeon® Scalable processor
- DDR4 3200 MHz RDIMM up to 512 GB (8 DIMMs) supports Intel® Optane™ Persistent Memory
- Features 3x PCIe x16, 1x PCIe x8, 2x PCIe x4, and 1x PCIe x1
- Intel® X550 dual 10GbE ports
- Eight SATA 3 and one M.2 connectors (SATA/PCIe compatible)
- 0 ~ 60 °C/ 32 ~ 140 °F ambient operating temperature range

Specifications

Form Factor	ATX form factor		
Processor System	Socket	Intel LGA4189 (Socket P+)	
	CPU type	Intel 3 rd Generation Xeon Scalable processors (CPU cooler should be purchased separately*)	
Core Logic	Chipset	Intel C621A chipset	
Memory	Total slots	8x (1 DIMM per channel)	
	Capacity	Maximum 512GB ECC RDIMM	
	Memory type	DDR4 ECC-REG 2666/2933/3200 MHz RDIMM/LRDIMM, supports Intel® Optane™ Persistent Memory	
	Memory size	8 GB, 16 GB, 32 GB, 64 GB, 128 GB (LRDIMM)	
Expansion Slots	Total PCI/PCI-X/PCIe slots	7	
	Slot location 1	PCIe x4 slot (x4 link), signal from PCH	
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU	
	Slot location 3	PCIe x8 slot (x4 link), signal from CPU	
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU	
	Slot location 5	PCIe x1 slot (x1 link), signal from PCH	
	Slot location 6	PCIe x16 slot (x16 link), signal from CPU	
Graphics	VGA	Aspeed AST 2500	
	SATA controller	Intel® C621A: 8 x SATA 3 (600 MB/s) support software RAID 0,1,5,10	
	SAS controller	-	
	Networking	GbE/10GbE LAN	2 x Intel® I210AT / Intel® X550-AT2 (dual 10GbE ports)
		PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector
	Onboard I/O Connector	USB connector	4 x USB 2.0 ports (two onboard headers) + 2 x USB 3.0 ports (one onboard header) + 1 x Type-A USB 2.0 port
		Fan header	6 x 4-pin (5 for system + 1 for CPU)
M.2		1 x M.2 2280/22110 B+M key (SATA and PCIe)	
SMBus		1	
Chassis intruder		1	
Front LAN LED		1	
Audio Header		1	
PS/2 KB/Mouse		1	
Rear I/O Connector	Serial port header	1	
	External serial port	1	
	External USB port	4x (USB 3.0) + 2x USB (2.0)	
	VGA port	1	
	RJ-45	5x (1 port dedicated for IPMI function)	
Management Solution	PS/2 KB/mouse	-	
	Software	-	
Monitoring	Out of band remote management	Yes	
	CPU temperature	Yes	
Watchdog Timer	System Monitoring	Yes	
	Output	System reset	
Power Requirement	Interval	Programmable 1 ~ 255 sec/min	
	Power On	3.3V 5V 12V 5Vsb -12V 12V_8P	
	(220W CPU@2.6GHz DDR4 2400 8G*8)	13.9754 4.565 9.40565 0.22408 0.08241 25.14	
Environment	Operating	Non-operating	
	Temperature	0 ~ 60 °C/32 ~ 140 °F, depends on CPU speed and cooling solution	
	Humidity	10% ~ 95% -40 ~ 85 °C/-40 ~ 185 °F	
Physical Characteristics	Dimension (L x H)	304 x 244 mm (12 x 9.6 in)	

*CPU power design support up to 270W TDP. Please consider extended air thermal solution while using CPU > 205W TDP.

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-816I-00A1	C621A	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-816T2-00A1	C621A	DDR4 RDIMM	2/2	Yes	AST 2500

Packing List

Part Number	Description	Quantity
2041081600	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 2
1960076488T000	I/O shield	x 1
1651003167-01	LGA4189 CPU carrier	x 1
(TBD)	Front panel convert cable	x 1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDB1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1970004597T000	LGA-4189 narrow CPU cooler for 2U/4U chassis (205W)
1700002204	Dual port USB cable (27 cm/10.6 in) with bracket
1700008461	Four port USB cable (30.5 cm/12 in) with bracket
1700020277-01	Dual port USB 3.0 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)
1960063434N000	Cable bracket for 1700019268-11
1960082347T000	For 1U chassis I/O shield

I/O View



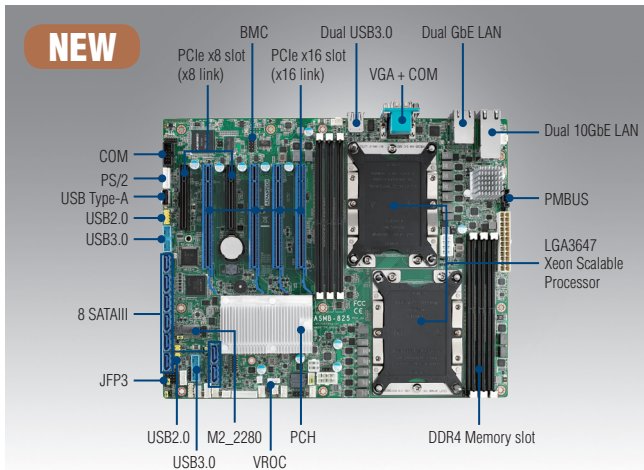
ASMB-816T2-00A1



ASMB-816I-00A1

ASMB-825

Dual LGA 3647-P0 Intel® Xeon® Scalable ATX Server Board with 6 DDR4, 4 PCIe x16 + 2 PCIe x8, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI



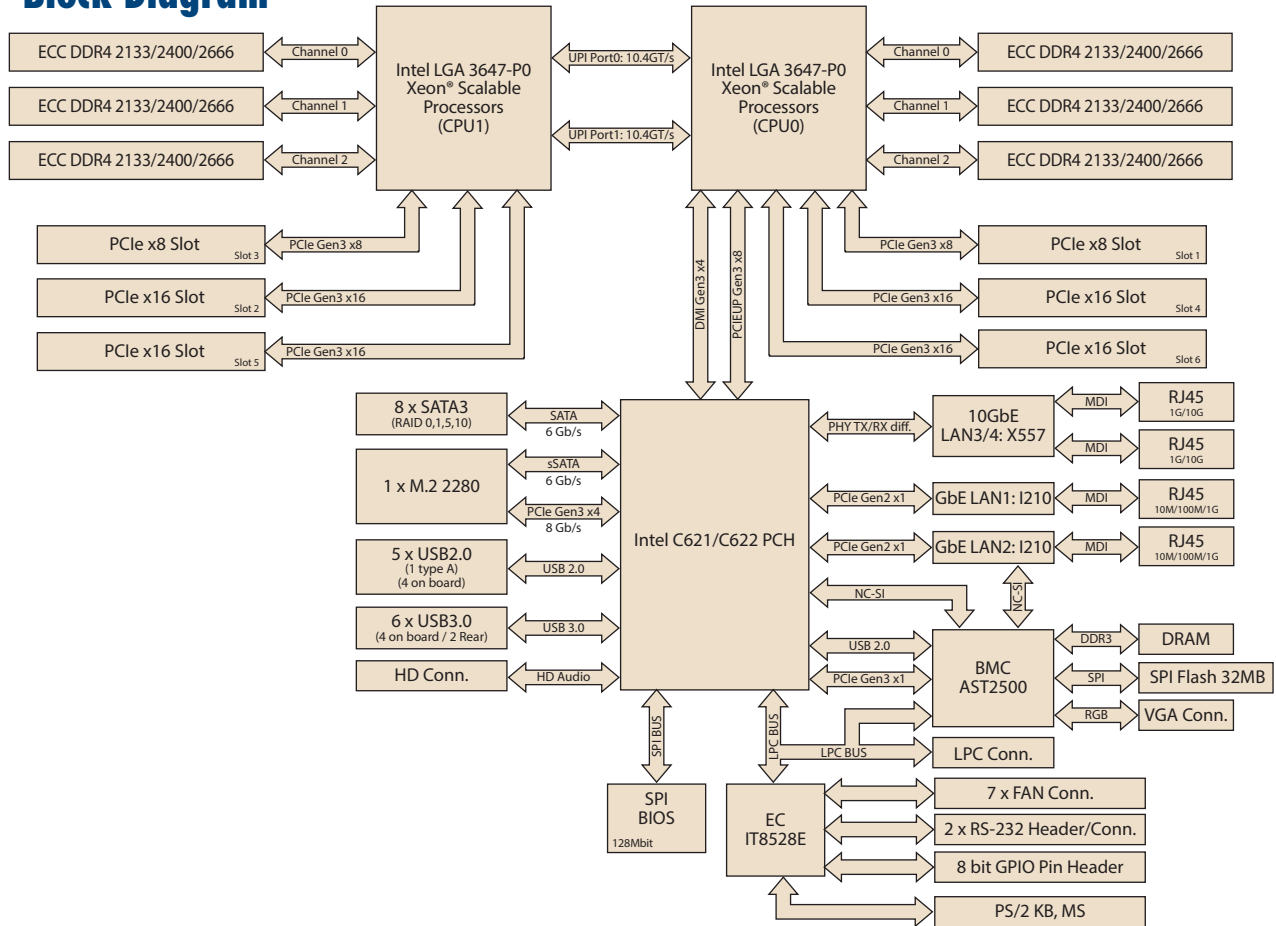
Features

- ATX server board with dual Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 384 GB (6 LRDIMMs), support Apache Pass
- Four PCIe x16 slots (Gen3) and two PCIe x8 (Gen3)
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and one M.2 connectors (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range

Specifications

Form Factor	ATX form factor								
Processor System	Socket	Intel LGA 3647-P0							
	CPU type	Intel Xeon Scalable dual processors (CPU cooler should be purchased separately and TDP up to 150W)							
Core Logic	Chipset	Intel C621/C622 chipset							
Memory	Total slots	6 (1 DIMM per channel)							
	Capacity	Maximum 384GB ECC LRDIMM Maximum 192GB ECC RDIMM							
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass							
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)							
Expansion Slots	Total PCI/PCI-X/PCIe slots	6							
	Slot location 1	PCIe x8 slot (x8 link), signal from CPU0							
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU1							
	Slot location 3	PCIe x8 slot (x8 link), signal from CPU1							
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU0							
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU1							
Slot location 6	PCIe x16 slot (x16 link), signal from CPU0								
Graphics	VGA	Aspeed AST 2500/2510							
Storage	SATA controller	Intel C621/C622: 8 x SATA3 (600 MB/s) support software RAID 0,1,5,10							
	SAS controller	-							
Networking	GbE/10GbE LAN	2 x Intel I210AT / Intel X557-AT2 (dual 10GbE ports)							
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector							
	USB connector	4 x USB2.0 ports (two onboard headers) + 4 x USB3.0 ports (two onboard headers) + 1 x Type-A USB2.0 port							
	Fan header	7 x 4-pin (5 for system + 2 for CPU)							
	M.2	1 x M.2 2280 B+M key (SATA and PCIe)							
	SMBus	1							
	Chassis intruder	1							
	Front LAN LED	1							
	Audio Header	1							
	PS/2 KB/Mouse	1							
	Serial port header	1							
Rear I/O Connector	External serial port	1							
	External USB port	2 (USB3.0)							
	VGA port	1							
	RJ-45	4 (LAN2 sharing with IPMI function)							
	PS/2 KB/mouse	-							
	Infiniband	-							
Management Solution	Software	-							
	Out of band remote management	Yes (ASMB-8251 & ASMB-825T2 SKUs)							
Monitoring	CPU temperature	Yes							
	System Monitoring	Yes							
Watchdog Timer	Output	System reset							
	Interval	Programmable 1 ~ 255 sec/min							
Power Requirement	Power On (150W CPU@2.6GHz DDR4 2400 8G*6)	3.3V	5V	12V	5Vsb	-12V	12V_8P_0	12V_8P_1	
		1.32966A	4.31024A	0.68597A	0.25408A	0.056846A	21.5989A	17.5921A	
		Operating							Non-operating
		0 ~ 40 °C, depends on CPU speed and cooler solution							-40 ~ 85 °C
		10 ~ 95%							
		304.8 x 244 mm (12" x 9.6")							
Environment	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution						-40 ~ 85 °C	
	Humidity	10 ~ 95%							
Physical Characteristics	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")							

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-825-00A1E	C621	DDR4 RDIMM	2/-	-	AST 2510
ASMB-825I-00A1E	C621	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-825T2-00A1E	C622	DDR4 RDIMM	2/2	Yes	AST 2500

Packing List

Part Number	Description	Quantity
2066825I00	Driver CD	x 1
2006825I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 2
1960076489T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 2

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960081155N001	LGA-3647 narrow CPU cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
1701090401	COM port cable (40 cm) with bracket
1700019268-11	PS/2 port cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
1960082348N000	1U chassis IO shield

I/O View



ASMB-825T2-00A1E

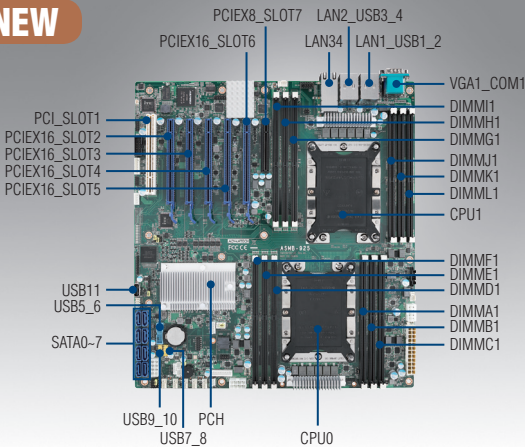


ASMB-825-00A1E
ASMB-825I-00A1E

ASMB-925

Dual LGA3647-P0 Intel® Xeon® Scalable EATX Server Board with 12 DDR4, 5 PCIe x16 + 1 PCIe x8 + 1 PCI, 8 SATA3, 6 USB3.0, Dual 10GbE, IPMI

NEW



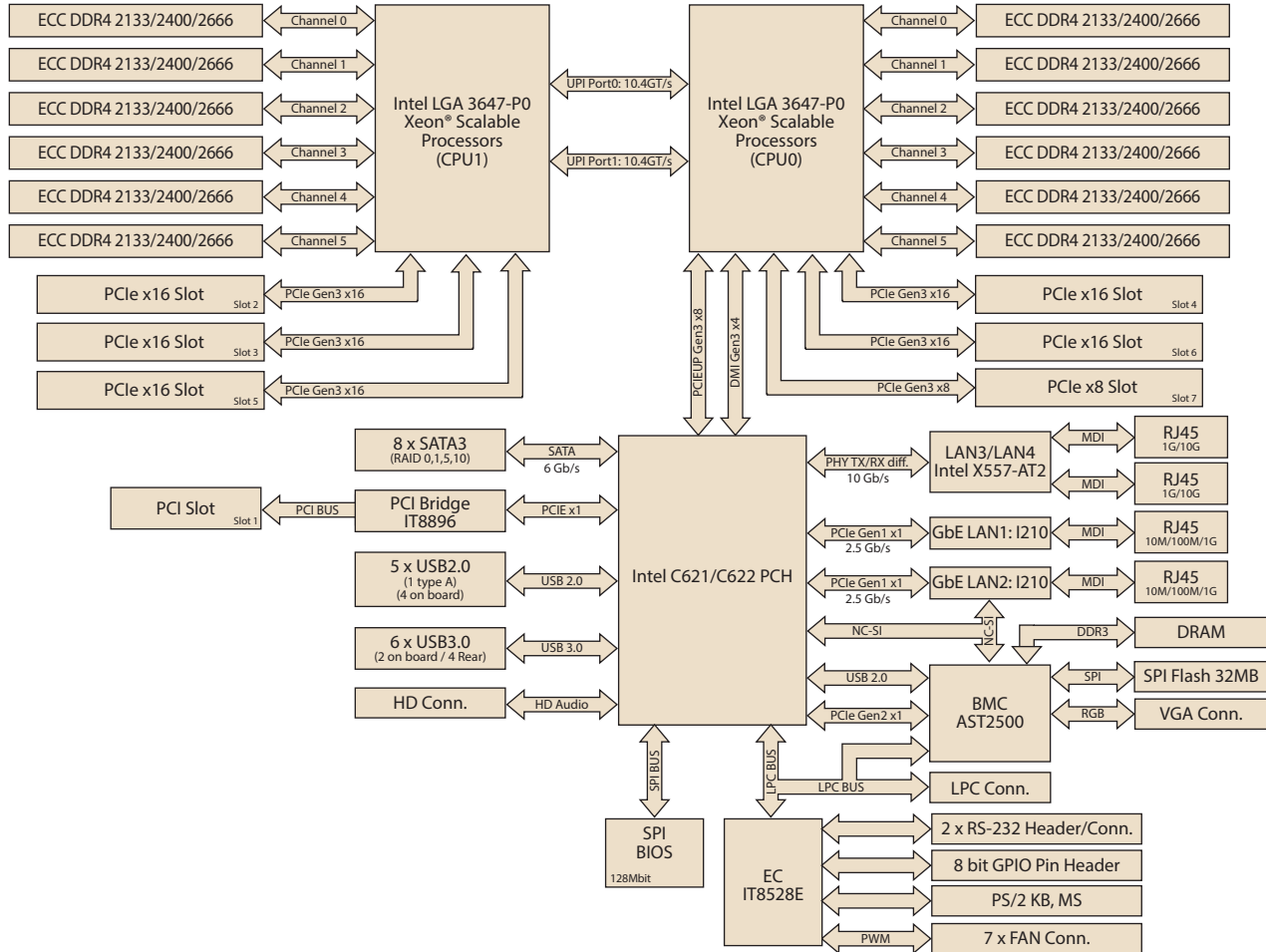
Features

- EATX server board with dual Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 786 GB (12 LRDIMMs), support Apache Pass
- Five PCIe x16 (Gen3), one PCIe x8 (Gen3), and one PCI slots
- Intel® X557-AT2 dual 10GbE ports
- Eight SATA3 and six USB3.0 ports
- 0 ~ 40 °C ambient operating temperature range

Specifications

Form Factor	EATX form factor								
Processor System	Socket	Intel LGA3647-P0							
	CPU type	Intel Xeon Scalable dual processors (CPU cooler should be purchased separately and TDP up to 205W)							
Core Logic	Chipset	Intel C621/C622 chipset							
	Total slots	12 (1 DIMM per channel)							
Memory	Capacity	Maximum 768GB ECC LRDIMM Maximum 384GB ECC RDIMM							
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass							
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)							
Expansion Slots	Total PCI/PCI-X/PCIe slots	7							
	Slot location 1	PCI, signal from PCH							
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU1							
	Slot location 3	PCIe x16 slot (x16 link), signal from CPU1							
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU0							
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU1							
	Slot location 6	PCIe x16 slot (x16 link), signal from CPU0							
Graphics	VGA	ASPEED AST2500/2510							
	SATA controller	Intel C621/C622: 8 x SATA3 (600 MB/s) support software RAID 0,1,5,10							
Storage	SAS controller	-							
	Network	GbE/10GbE LAN	2 x Intel I210AT / Intel X557-AT2 (dual 10GbE ports for ASMB-925T2 sku only)						
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector							
	USB connector	4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard headers) + 1 x Type-A USB2.0 port							
	Fan header	7 x 4pin (5 for system + 2 for CPU)							
	SMBus	1							
	Chassis intruder	1							
	Front LAN LED	1							
	Audio Header	1							
	PS/2 KB/Mouse	1							
Rear I/O Connector	Serial port header	1							
	External serial port	1							
	External USB port	4 (USB3.0)							
	VGA port	1							
	RJ-45	4 (LAN2 sharing with IPMI function)							
	PS/2 KB/mouse	-							
Management Solution	Infiniband	-							
	Software	-							
Monitoring	Out of band remote management	Yes (ASMB-925I/ASMB-925T2 sku only)							
	CPU temperature	Yes							
Watchdog Timer	System Monitoring	Yes							
	Output	System reset							
Power Requirement	Interval	Programmable 1 ~ 255 sec/min							
	Power On	3.3V	5V	12V	5Vsb	-12V	12V_8P_0	12V_8P_1	
	(205W CPU@2.5GHz DDR4 2400 4G*12)	1.51A	5.19A	0A	0.05A	0A	20.58A	20.08A	
	Operating	-		-		-		-	
	Non-operating	-		-		-		-	
Environment	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution		-40 ~ 85 °C		-		-	
	Humidity	10% ~ 95%		10% ~ 95% (Non condensing)		-		-	
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")							

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-925-00A1	C621	DDR4 RDIMM	2/-	-	AST2510
ASMB-925I-00A1	C621	DDR4 RDIMM	2/-	Yes	AST2500
ASMB-925T2-00A1	C622	DDR4 RDIMM	2/2	Yes	AST2500

Packing List

Part Number	Description	Quantity
2061092500	Driver CD	x 1
2001092500	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1960076488T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 2

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00A1E	TPM1.2 Module
PCA-TPM-00B1E	TPM2.0 Module
1960081155N001	LGA-3647 narrow CPU cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1960081603N101	LGA-3647 narrow CPU cooler for 4U chassis (205W)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1700028024-01	Dual port USB 3.0 cable (45 cm) with bracket
1701090401	COM port cable with bracket
1960082347T000	For 1U chassis IO shield

I/O View



ASMB-925T2-00A1

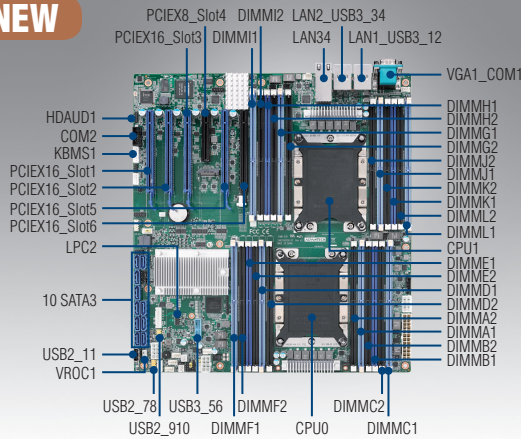


ASMB-925-00A1
ASMB-925I-00A1

ASMB-935

Dual LGA3647-PO Intel® Xeon® Scalable EATX Server Board with 24 DDR4, 5 PCIe x16 + 1 PCIe x8, 10 SATA3, 6 USB3.0, Dual 10GbE, IPMI

NEW



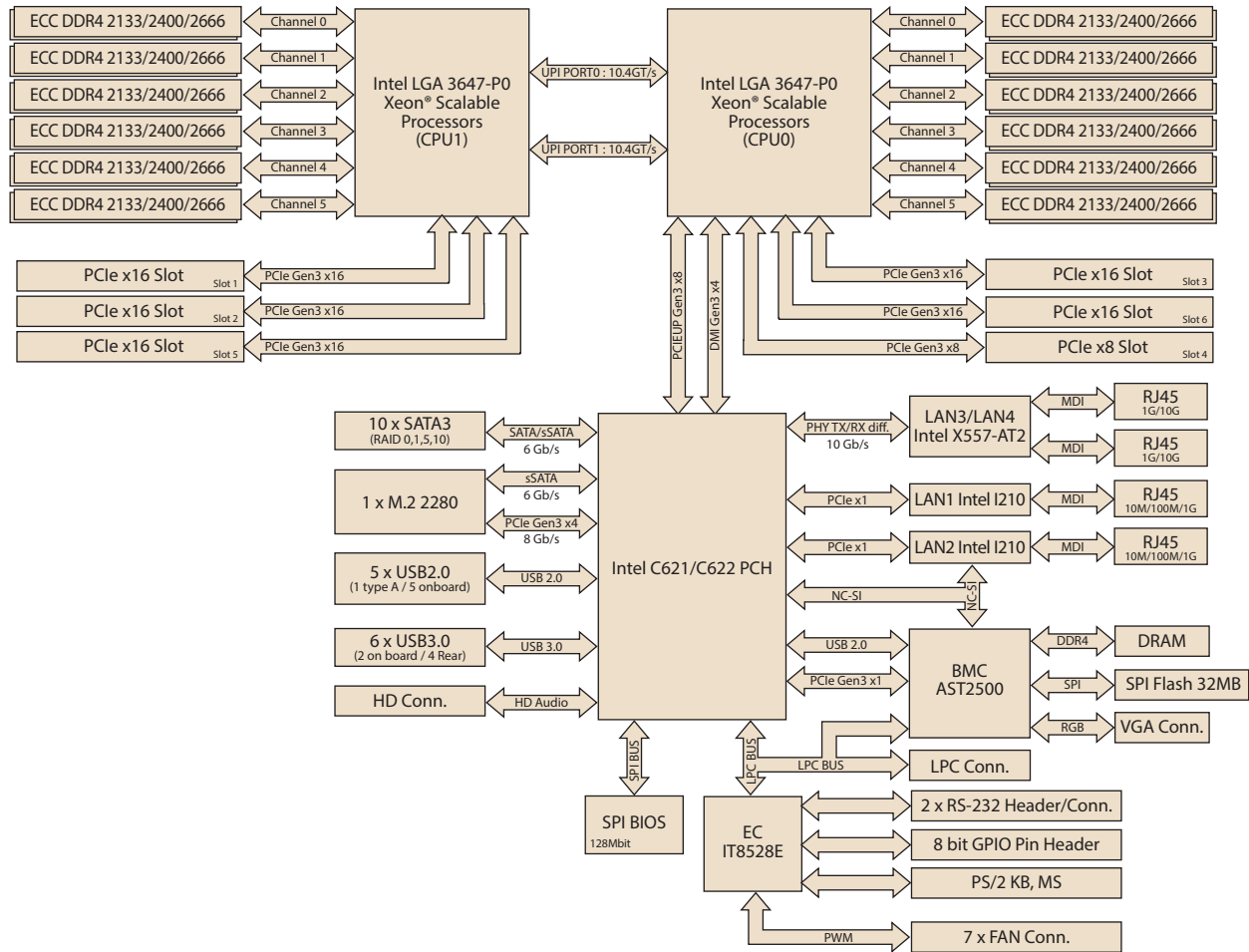
Features

- EATX server board with dual Xeon Scalable processors
- DDR4 2666 MHz RDIMM up to 1.5 TB (24 LDIMMs), support Apache Pass
- Five PCIe x16 (Gen3) and one PCIe x8 (Gen3) for three double-deck cards
- Intel® X557-AT2 dual 10GbE ports
- Ten SATA3 and six USB3.0 ports
- One M.2 2280 (SATA / PCIe compatible)
- 0 ~ 40 °C ambient operating temperature range

Specifications

Form Factor	EATX form factor	
Processor System	Socket	Intel LGA3647-PO
	CPU type	Intel Xeon Scalable dual processors (CPU cooler should be purchased separately and TDP up to 205W)
Core Logic	Chipset	Intel C620 Series
Memory	Total slots	24 (2 DIMM per channel)
	Capacity	Maximum 1.5 TB ECC LRDIMM Maximum 768GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2133/2400/2666 MHz DIMM, support Apache Pass
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)
Expansion Slots	Total PCIe slots	6
	Slot location 1	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 2	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 3	1 x PCIe x16 slot (x16 link), signal from CPU0
	Slot location 4	1 x PCIe x8 slot (x8 link), signal from CPU0
	Slot location 5	1 x PCIe x16 slot (x16 link), signal from CPU1
Slot location 6	1 x PCIe x16 slot (x16 link), signal from CPU0	
Graphics	VGA	ASPEED AST2500/2510
Storage	SATA controller	Intel C621/C622: 10 x SATA3 (600 MB/s) support software RAID 0,1,5,10
	SAS controller	-
Networking	GbE/10GbE LAN	2 x Intel I210AT + Intel X557-AT2 (dual 10GbE ports for ASMB-935T2 sku only)
Onboard I/O Connector	PSU connector	24-pin SSI power connector + 3 x 8-pin SSI 12 V power connector
	USB connector	4 x USB2.0 ports (two onboard headers) + 2 x USB3.0 ports (one onboard headers) + 1 x Type-A USB2.0 port
	Fan header	7 x 4pin (5 for system + 2 for CPU)
	M.2	1 x M.2 2280 B+M key (SATA and PCIe)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	1
	Audio Header	1
Rear I/O Connector	PS/2 KB/Mouse	1
	Serial port header	1
	External serial port	1
	External USB port	4 (USB3.0)
	VGA port	1
	RJ-45	4 (LAN2/4 sharing with IPMI function)
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-935I/ASMB-935T2 sku only)
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_0 12V_8P_1
	(205W CPU@2.5GHz DDR4 2400 32G*24)	6.77A 5.11A 0.04A 0.17A 0.01A 21.49A 23.19A
Environment	Operating	Non-operating
	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95%
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")
		10% ~ 95% (Non condensing)

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-935-00A1	C621	24 x DDR4 RDIMM	2/-	-	AST2510
ASMB-935I-00A1	C621	24 x DDR4 RDIMM	2/-	Yes	AST2500
ASMB-935T2-00A1	C622	24 x DDR4 RDIMM	2/2	Yes	AST2500

Packing List

Part Number	Description	Quantity
2061093500	Driver CD	x 1
2001093500	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 2
1960076488T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 2

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM2.0 Module
1960081155N001	LGA-3647 narrow CPU cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1960081603N101	LGA-3647 narrow CPU cooler for 4U chassis (205W)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1700028024-01	Dual port USB 3.0 cable (45 cm) with bracket
1701090401	COM port cable with bracket
1960082347T000	For 1U chassis IO shield

I/O View



ASMB-935T2-00A1

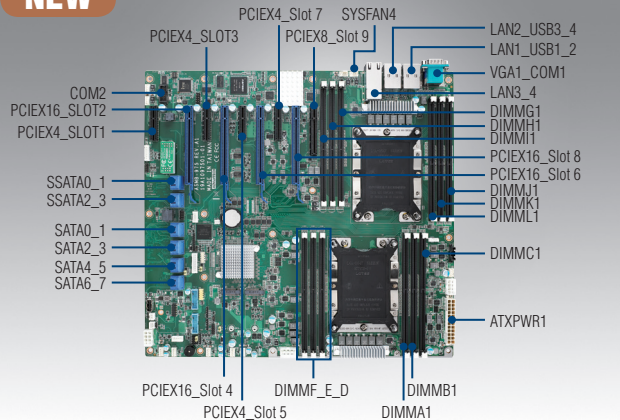


ASMB-935-00A1
ASMB-935I-00A1

ASMB-975

Dual LGA 3647-PO Intel® Xeon® Scalable Proprietary Server Board with 12 DDR4, 4 PCIe x16 + 1 PCIe x8+4 PCIe x4, 14 SATA3, 8 USB3.0, Dual 10GbE, IPMI

NEW



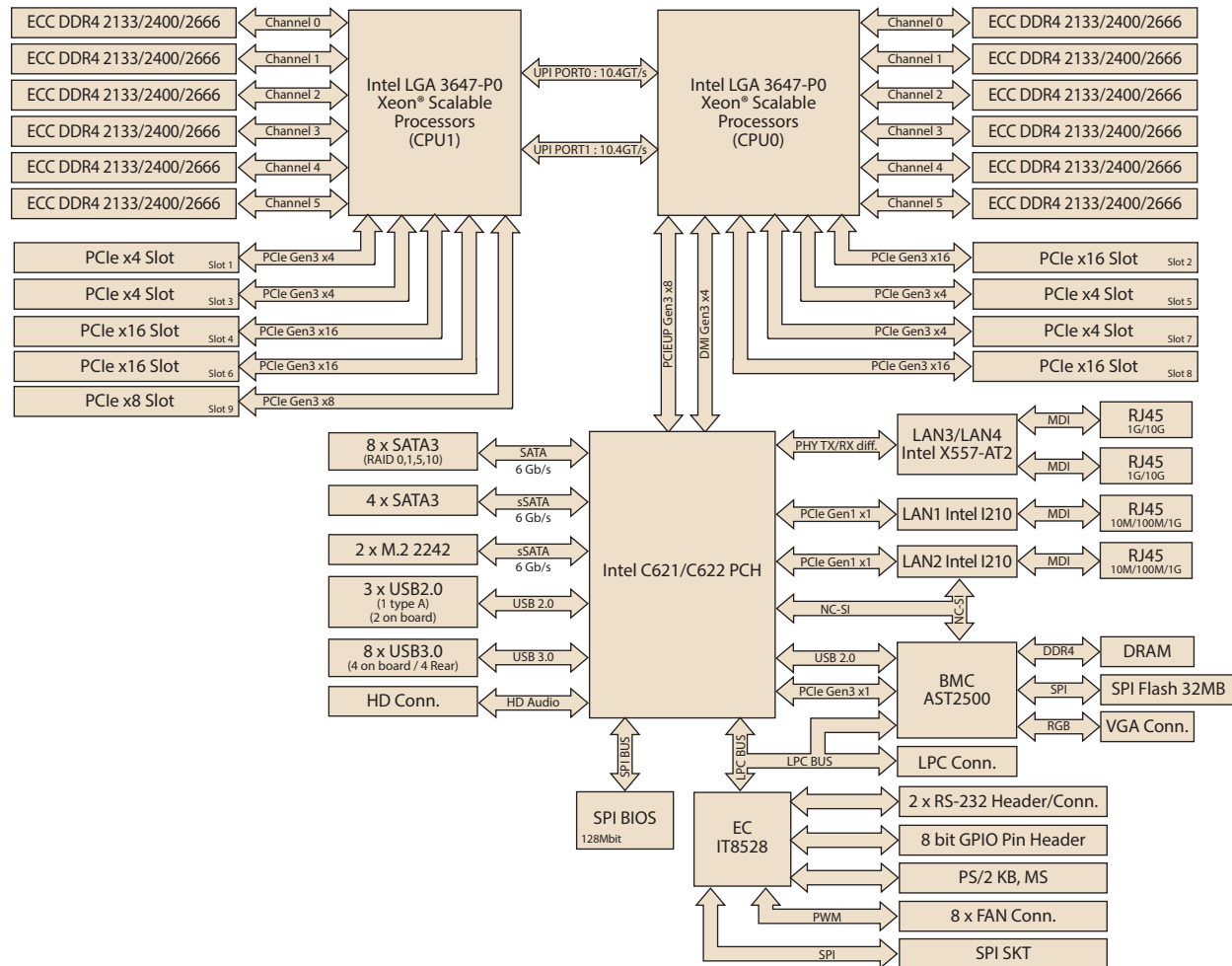
Features

- Proprietary server board with dual Xeon® Scalable processors
- DDR4 2666 MHz RDIMM up to 768 GB (12 LRDIMMs), support Apache Pass
- 14 SATA3 connectors (including 2 SATA M.2 2242)
- Four PCIe x16 slots (Gen3) for double-deck cards
- Intel® X557-AT2 dual 10GbE ports
- 0 ~ 40 °C ambient operating temperature range

Specifications

Form Factor	Proprietary (14.1" x 13")	
Processor System	Socket	Intel LGA 3647-PO
	CPU type	Intel Xeon Scalable dual processors (CPU cooler should be purchased separately and TDP up to 205W)
Core Logic	Chipset	Intel C621/C622 chipset
Memory	Total slots	12 (1 DIMM per channel)
	Capacity	Maximum 768GB ECC LRDIMM Maximum 384GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2133/2400 /2666 MHz DIMM, support Apache Pass
	Memory size	4 GB, 8 GB, 16 GB, 32 GB, 64 GB (LRDIMM)
Expansion Slots	Total PCIe slots	9
	Slot location 1	PCIe x4 slot (x4 link), signal from CPU1
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU0
	Slot location 3	PCIe x4 slot (x4 link), signal from CPU1
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 5	PCIe x4 slot (x4 link), signal from CPU0
	Slot location 6	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 7	PCIe x4 slot (x4 link), signal from CPU0
	Slot location 8	PCIe x16 slot (x16 link), signal from CPU0
Slot location 9	PCIe x8 slot (x8 link), signal from CPU1	
Graphics	VGA	Aspeed AST 2500/2510
Storage	SATA controller	Intel C621/C622: 12 x SATA3 (600 MB/s) support software RAID 0,1,5,10
	SAS controller	-
Networking	GbE/10GbE LAN	2 x Intel I210AT / Intel X557-AT2 (dual 10GbE ports)
	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector
Onboard I/O Connector	USB connector	2 x USB2.0 ports (two onboard headers) + 4 x USB3.0 ports (two onboard headers) + 1 x Type-A USB2.0 port
	Fan header	8 (6 for system fan + 2 for CPU fan)
	M.2	2 x M.2 2242 M key (SATA)
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Audio Header	1
	PS/2 KB/Mouse	1
	Serial port header	1
	Rear I/O Connector	External serial port
External USB port		4 (USB3.0)
VGA port		1
RJ-45		4 (Lan2 sharing IPMI)
PS/2 KB/mouse		-
Infiniband		-
Software		-
Management Solution	Out of band remote management	Yes
	CPU temperature	Yes
Monitoring	System Monitoring	Yes
	Output	System reset
Watchdog Timer	Interval	Programmable 1 ~ 255 sec/min
	Power Requirement	Power On
(205W CPU@2.5GHz DDR4 2400 8G*12)		1.37A 6.83A 0.09A 0.14A 0.03A 20.11A 20.52A
Environment	Operating	Non-operating
	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
Physical Characteristics	Humidity	-40 ~ 85 °C
	Dimension (L x H)	10% ~ 95% 10% ~ 95% (Non condensing)
		358.1 x 330.2 mm (14.1" x 13")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE/10GbE LAN	IPMI	Graphics
ASMB-975-00A1	C621	DDR4 RDIMM	2/-	-	AST 2510
ASMB-975I-00A1	C621	DDR4 RDIMM	2/-	Yes	AST 2500
ASMB-975T2-00A1	C622	DDR4 RDIMM	2/2	Yes	AST 2500

Packing List

Part Number	Description	Quantity
2066975100	Driver CD	x 1
2001097500	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
1930008089	Screw for M.2 device	x 3
1960076488T000	I/O shield	x 1
1651003167-01	LGA3647 CPU clip	x 2

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960081155N001	LGA-3647 narrow CPU cooler for 1U chassis (85W)
1960081603N001	LGA-3647 narrow CPU cooler for 2U/4U chassis (150W)
1960081603N101	LGA-3647 narrow CPU cooler for 4U chassis (205W)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1700028024-01	Dual port USB 3.0 cable (45 cm) with bracket
1701090401	COM port cable with bracket

I/O View



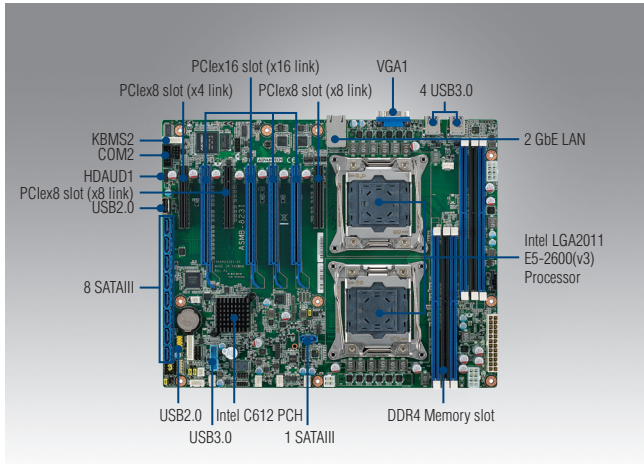
ASMB-975-00A1
ASMB-975I-00A1



ASMB-975T2-00A1

ASMB-823

Dual LGA 2011-R3 Intel® Xeon® E5-2600 v3/ v4 ATX Server Board with 6 DDR4, 4 PCIe x16, 6 USB 3.0, SATA3, Dual LAN, IPMI



Features

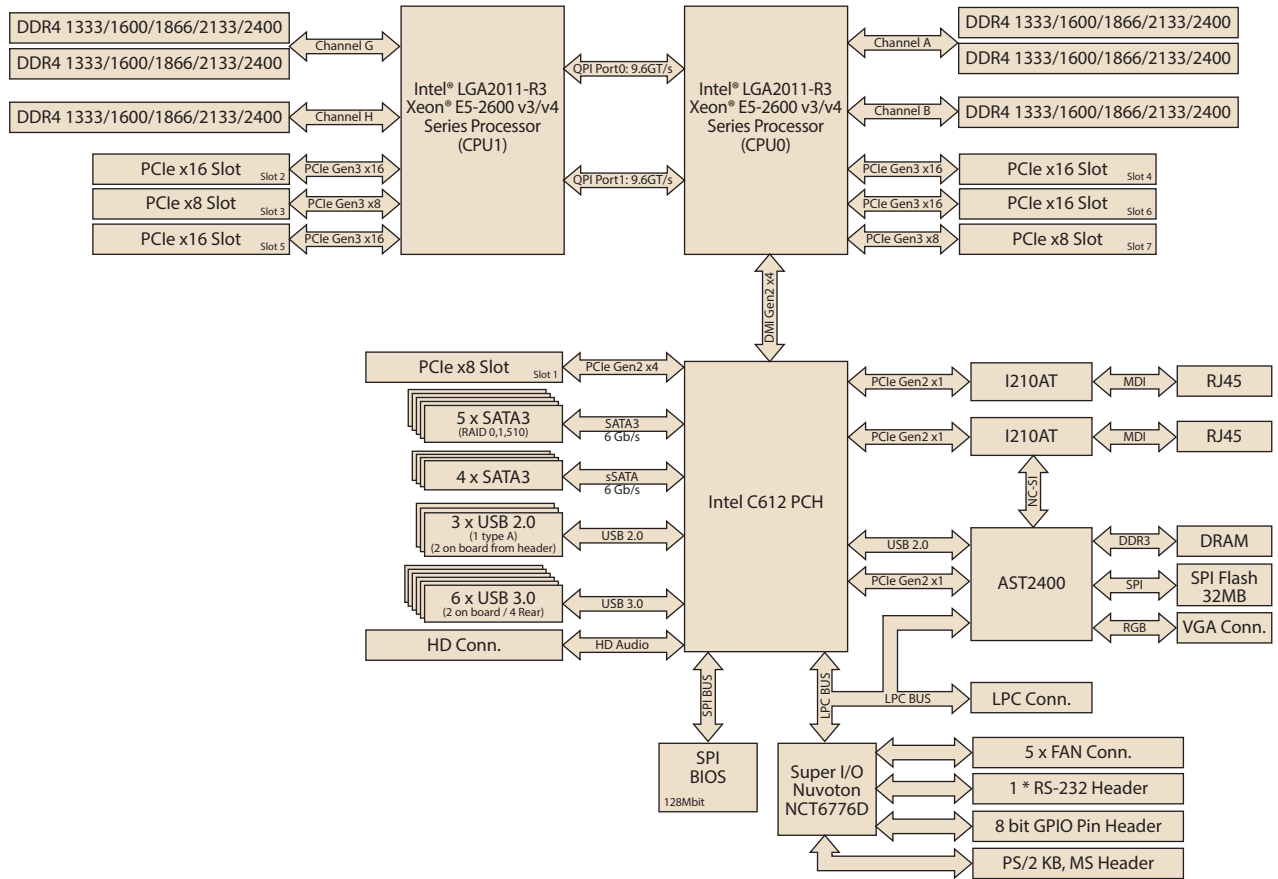
- ATX server board with dual Xeon® E5-2600 v3/v4 processors
- DDR4 2400 MHz RDIMM up to 192 GB
- Four PCIe x16 slots (Gen3), two PCIe x8 (Gen3) and one PCIe x4 (Gen2) slots
- Nine SATA3 ports and six USB 3.0 ports
- 0 ~ 40 °C ambient operating temperature range



Specifications

Form Factor	ATX form factor					
Processor System	Socket	Intel LGA 2011-R3				
	CPU type	Intel® Xeon® E5-2600 v3/v4 dual processor (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series (1S conditional support, please contact to Advantech application engineer)				
Core Logic	Chipset	Intel C612 chipset				
	Total slots	6 (Quad Channel)				
Memory	Capacity	Maximum 192 GB ECC RDIMM				
	Memory type	DDR4 ECC-REG 2400/2133/1866/1600/1333 MHz DIMM				
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB, 32 GB				
Expansion Slots	Total PCI/PCI-X/PCIe slots	7				
	Slot location 1	PCIe x8 slot (x4 link), signal from PCH				
	Slot location 2	PCIe x16 slot (x16 link), signal from CPU1				
	Slot location 3	PCIe x8 slot (x8 link), signal from CPU1				
	Slot location 4	PCIe x16 slot (x16 link), signal from CPU0				
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU1				
	Slot location 6	PCIe x16 slot (x16 link), signal from CPU0				
	Slot location 7	PCIe x8 slot (x8 link), signal from CPU0				
Graphics	VGA	Aspeed AST2400/1400 64 MB				
	IDE controller	-				
	Storage	SATA controller	Intel C610: 9 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA4 supports software RAID 0, 1, 10 & 5)			
Networking	SAS controller	-				
	GbE LAN	2 x Intel I210AT				
Onboard I/O Connector	Floppy connector	-				
	PSU connector	24-pin SSI power connector + 2 x 8-pin SSI 12 V power connector + 4-pin SSI 12 V power connector				
	USB connector	2 x USB2.0 ports (in one header) + 2 x USB3.0 ports (in one header) + 1*Type-A USB2.0 ports				
	Fan header	5 x 4-pin (2 for CPU + 3 for SYS)				
	SMBus	1				
	Chassis intruder	1				
	Front LAN LED	2				
	Audio Header	1				
	Serial port header	1				
	Rear I/O Connector	External serial port	-			
External USB port		4 (USB 3.0)				
VGA port		1				
RJ-45		2 (one sharing IPMI function)				
PS/2 KB/mouse		1 (by onboard connector)				
Management Solution	Infiniband	-				
	Software	-				
Monitoring	Out of band remote management	Yes				
	CPU temperature	Yes				
Watchdog Timer	System Monitoring	Yes				
	Output	System reset				
Power Requirement	Interval	Programmable 1 ~ 255 sec/min				
	Power On	3.3V	5V	12V	5Vsb	-12V
Environment		1.67A	0.85A	18.11A	0.05A	0.004A
	Operating	Non-operating				
	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution		-40 ~ 85 °C		
Physical Characteristics	Humidity	10% ~ 90%		10% ~ 95% (Non condensing)		
	Dimension (L x H)	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	Graphics
ASMB-823-00A1E	C612	DDR4 RDIMM	2	-	AST 1400
ASMB-823I-00A1E	C612	DDR4 RDIMM	2	Yes	AST 2400

Packing List

Part Number	Description	Quantity
2066823I01	Driver CD	x 1
2006823I10	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
1700019748	CPU power cable	x 2
19Z0000777T000	I/O shield	x 1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960057226N001	LGA2011 square CPU heatsink for 1U chassis (95W)
1960055362N001	LGA2011 square CPU cooler for 2U/4U chassis (145W)
1960065684N011	LGA2011 square CPU cooler for 4U chassis (160W)*
1700019127	FAN connector extended cable 1*4P-2.54/1*4P-2.54 35cm
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1700020277-01	Dual port USB 3.0 cable (30 cm) with bracket
1701090401	COM port cable (40 cm) with bracket
1700019268-11	PS/2 cable (35 cm)
1960063434N000	Cable bracket for 1700019268-11
19Z0000806T000	1U chassis IO shield
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
968EMLSAP2	SUSIAccess Pro 3.0

Note : Purchasing ASMB-823's proprietary CPU cooler from Advantech is a must. The 160W cooler for 4U chassis has option of CPUFAN1 cable 1700019127 when length is an issue.

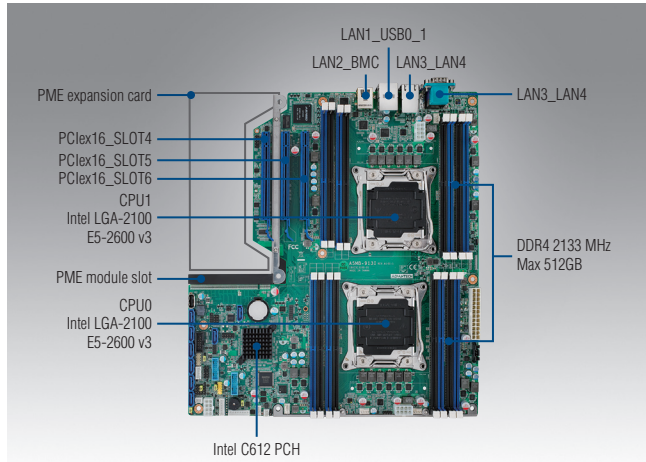
I/O View



ASMB-823I-00A1E
ASMB-823-00A1E

ASMB-913

Dual LGA 2011-R3 Intel® Xeon® E5-2600 v3/v4 EATX Server Board with 16 DDR4 DIMM, 3 PCIe x16, 6 USB 3.0, PME Support, IPMI



Features

- EATX server board with dual Xeon® E5-2600 v3/v4 processor
- 16 x DDR4 2400 MHz RDIMM up to 512 GB
- Three PCIe x16 slot (Gen3.0) and PME expansion slot
- PME expansion cards supporting list is on page 9-32
- 0 ~ 40 °C ambient operating temperature range

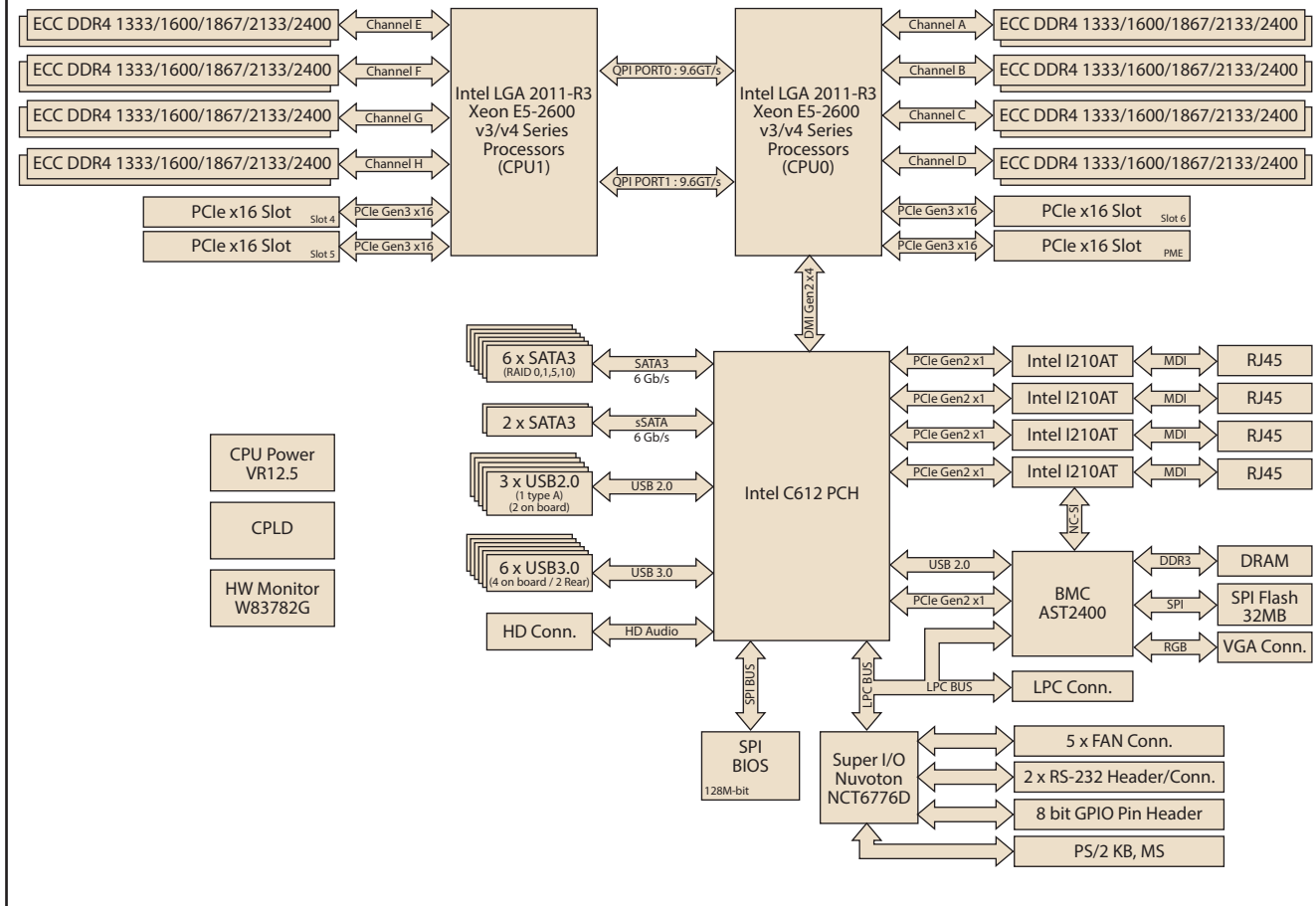
Note: ASMB-913I could enable PME slot when processor is installed in CPU0 socket.



Specifications

Form Factor		Extended ATX form factor
Processor System	Socket	Intel LGA 2011-R3
	CPU type	Intel® Xeon® E5-2600 v3/v4 dual processor (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series (1S conditional support, please contact to Advantech application engineer)
Core Logic	Chipset	Intel C612 chipset
Memory	Total slots	16 (Quad Channel)
	Capacity	Maximum 512 GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2400/2133/1866/1600 MHz DIMM
	Memory size	4 GB, 8 GB, 16 GB, 32 GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	6
	Slot location 1	Fit to PME daughter board
	Slot location 2	Fit to PME daughter board
	Slot location 3	Fit to PME daughter board
	Slot location 4	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 5	1 x PCIe x16 slot (x16 link), signal from CPU1
	Slot location 6	1 x PCIe x16 slot (x16 link), signal from CPU0
Graphics	VGA	Aspeed AST2400/1400 64 MB
	IDE controller	-
Storage	SATA controller	Intel C612: 8 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA5 and sSATA0-sSATA1 Supports software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	GbE LAN	4 x Intel I210AT
Onboard I/O Connector	Floppy connector	-
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector
	USB connector	2 (supports 4 USB port), 1* Type-A , 2* USB3.0 20pin header (supports 4*USB 3.0 port)
	Fan header	5 x 4-pin
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Audio Header	1
	Serial port header	1
	Rear I/O Connector	External serial port
External USB port		2 (USB3.0)
VGA port		1
RJ-45		4 (one sharing IPMI function)
PS/2 KB/mouse		-
Infiniband		-
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-913I sku only)
Monitoring	CPU temperature	Yes
	System Monitoring	Yes
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirement	Power On	3.3V 1.4A 5V 0.5A 12V 23.2A 5Vsb 0.09A -12V 0.05A
	Operating	Non-operating
Environment	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95% -40 ~ 85 °C 10% ~ 95% (Non condensing)
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	Graphics
ASMB-913-00A1E	C612	16 x DDR4 RDIMM	2	-	AST 1400
ASMB-913I-00A1E	C612	16 x DDR4 RDIMM	4	Yes	AST 2400

Packing List

Part Number	Description	Quantity
2061913101	Driver CD	x 1
2001913110	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1700019748	CPU power cable(8P)	x 2
19Z0000995T000	I/O shield	x 1

Optional Accessories

Part Number	Description
ASMB-FF3P8-12A1E	PME card with 1 PCIe x8 slot and 1 PCIe x4 slot and 1 PCI slot
ASMB-FF3PX-12A1E	PME card with 2 PCI-X and 1 PCI slots
ASMB-FF20F-02A1E	PME card with 2 PCIe x16 slots
ASMB-FF208-02A1E	PME card with 2 PCIe x 8 slots
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960057226N001	LGA-2011 CPU heatsink for 1U chassis (95W)
1960055362N001	LGA-2011 square CPU cooler for 2U/4U chassis (145W)
1960065684N011	LGA-2011 square CPU cooler for 4U chassis (160W)
1700019127	FAN connector extended cable 1*4P-2.54/1*4P-2.54 35cm
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1700028024-01	Dual port USB 3.0 cable (45 cm) with bracket
1700019268-11	PS/2 cable (35 cm)
1701090401	COM port cable with bracket
19Z0001086N000	1U chassis IO shield
968EMLSAP2	SUSIAccess Pro 3.0

I/O View



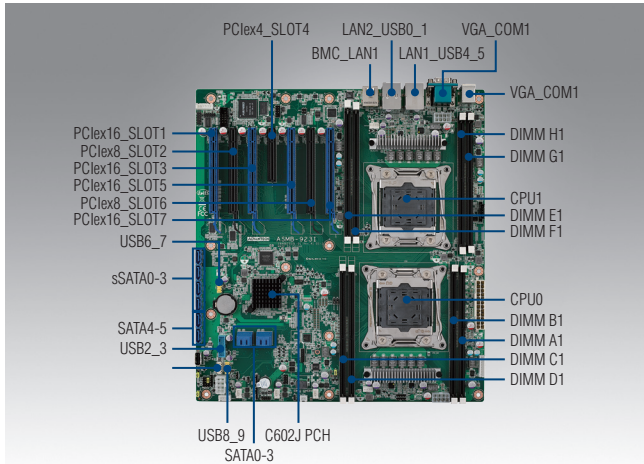
ASMB-913-00A1E



ASMB-913I-00A1E

ASMB-923

Dual LGA 2011-R3 Intel® Xeon® E5-2600 v3/v4 EATX Server Board with 8 DDR4, 4 PCIe x16+ 2 PCIe x8, 4 USB 3.0, IPMI



Features

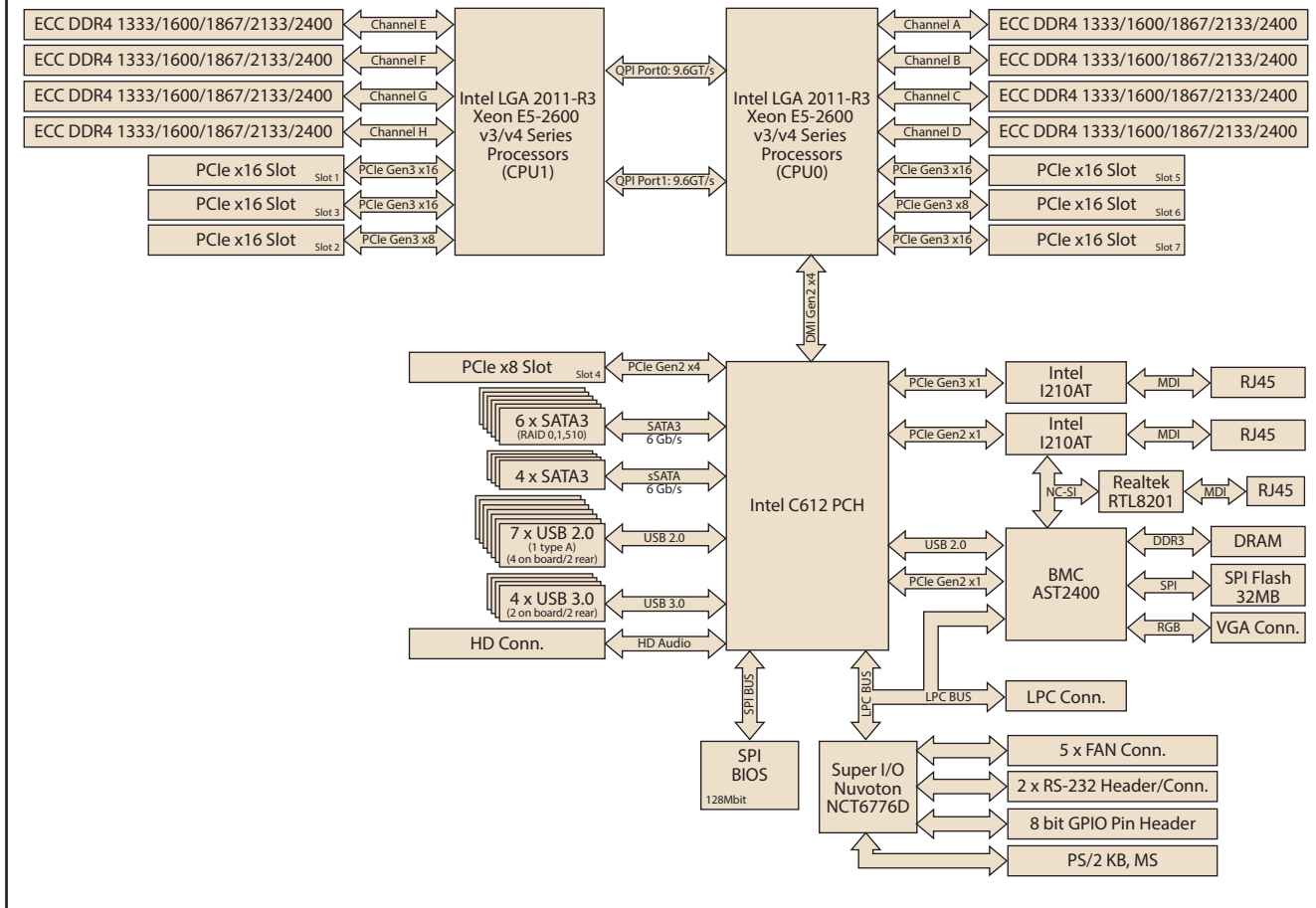
- EATX server board with dual Xeon® E5-2600 v3/v4 processor, 8 DIMMs 256 GB memory capacity
- DDR4 2400 MHz RDIMM up to 256 GB
- Four PCIe x16 slots (Gen3) + two PCIe x8 slots (Gen3.0) and one PCIe x4 (Gen2.0)
- 0 ~ 40 °C ambient operating temperature range



Specifications

Form Factor		Extended ATX form factor
Processor System	Socket	Intel LGA 2011-R3
	CPU type	Intel® Xeon® E5-2600 v3/v4 dual processor (CPU cooler should be purchased separately and TDP up to 160W) Intel® Xeon® E5-1600 v3/v4 Series (1S conditional support, please contact to Advantech application engineer)
Core Logic	Chipset	Intel C612 chipset
	Total slots	8 (Quad Channel)
Memory	Capacity	Maximum 256 GB ECC RDIMM
	Memory type	DDR4 ECC-REG 2400/2133/1866/1600/1333 MHz DIMM
	Memory size	1 GB, 2 GB, 4 GB, 8 GB, 16 GB, 32 GB
Expansion Slots	Total PCI/PCI-X/PCIe slots	7
	Slot location 1	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 2	PCIe x16 slot (x8 link), signal from CPU1
	Slot location 3	PCIe x16 slot (x16 link), signal from CPU1
	Slot location 4	PCIe x8 slot (x4 link), signal from PCH
	Slot location 5	PCIe x16 slot (x16 link), signal from CPU0
	Slot location 6	PCIe x16 slot (x8 link), signal from CPU0
Graphics	VGA	Aspeed AST2400/1400 64 MB
	IDE controller	-
Storage	SATA controller	Intel C610: 10 SATA3 6 Gb/s ports Intel Rapid Storage Technology (for Windows only) (SATA0-SATA5 and sSATA0-sSATA3 Supports software RAID 0, 1, 10 & 5)
	SAS controller	-
Networking	GbE LAN	2 x Intel I210AT
Onboard I/O Connector	Floppy connector	-
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector + 8-pin SSI 12 V power connector
	USB connector	2 (supports 4 USB port), 1* Type-A , 1* USB3.0 20pin header (supports 2*USB 3.0 port)
	Fan header	5 x 4-pin
	SMBus	1
	Chassis intruder	1
	Front LAN LED	2
	Audio Header	1
	Serial port header	1
Rear I/O Connector	External serial port	1
	External USB port	4 (2*USB2.0 + 2*USB3.0)
	VGA port	1
	RJ-45	3 (1 port dedicated for IPMI function)
	PS/2 KB/mouse	1
	Infiniband	-
Management Solution	Software	-
	Out of band remote management	Yes (ASMB-923I sku only)
Monitoring	CPU temperature	Yes
	System Monitoring	Yes
Watchdog Timer	Output	System reset
	Interval	Programmable 1 ~ 255 sec/min
Power Requirement	Power On	3.3V 1.69A 5V 1.00A 12V 17.42A 5Vsb 0.05A -12V 0.01A
	Operating	Non-operating
Environment	Temperature	0 ~ 40 °C, depends on CPU speed and cooler solution
	Humidity	10% ~ 95% -40 ~ 85 °C 10% ~ 95% (Non condensing)
Physical Characteristics	Dimension (L x H)	304.8 x 330.2 mm (12" x 13")

Block Diagram



Ordering Information

Part Number	Chipset	Memory	GbE LAN	IPMI	Graphics
ASMB-923-00A1E	C612	DDR4 RDIMM	2	-	AST 1400
ASMB-923I-00A1E	C612	DDR4 RDIMM	2	Yes	AST 2400

Packing List

Part Number	Description	Quantity
2066923101	Driver CD	x 1
2006923110	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1700019748	CPU power cable(8P)	x 2
1960052312T010	I/O shield	x 1

Optional Accessories

Part Number	Description
PCA-AUDIO-HDA1E	HD Audio-card
PCA-TPM-00B1E	TPM 2.0 Module by LPC
1960057226N001	LGA-2011 square CPU heatsink for 1U chassis (95W)
1960055362N001	LGA-2011 square CPU cooler for 2U/4U chassis (145W)
1960065684N011	LGA-2011 square CPU cooler for 4U chassis (160W)
1700028025-01	Dual port USB cable (45 cm) with bracket
1700028042-01	Four port USB cable (45 cm) with bracket
1701090401	COM port cable with bracket
1920000406T000	1U chassis IO shield
968EMLSAP2	SUSIAccess Pro 3.0

I/O View



ASMB-923-00A1E



ASMB-923I-00A1E