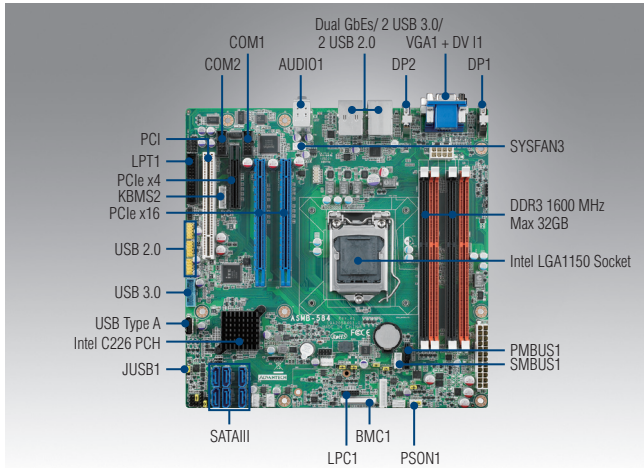


# ASMB-584

**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

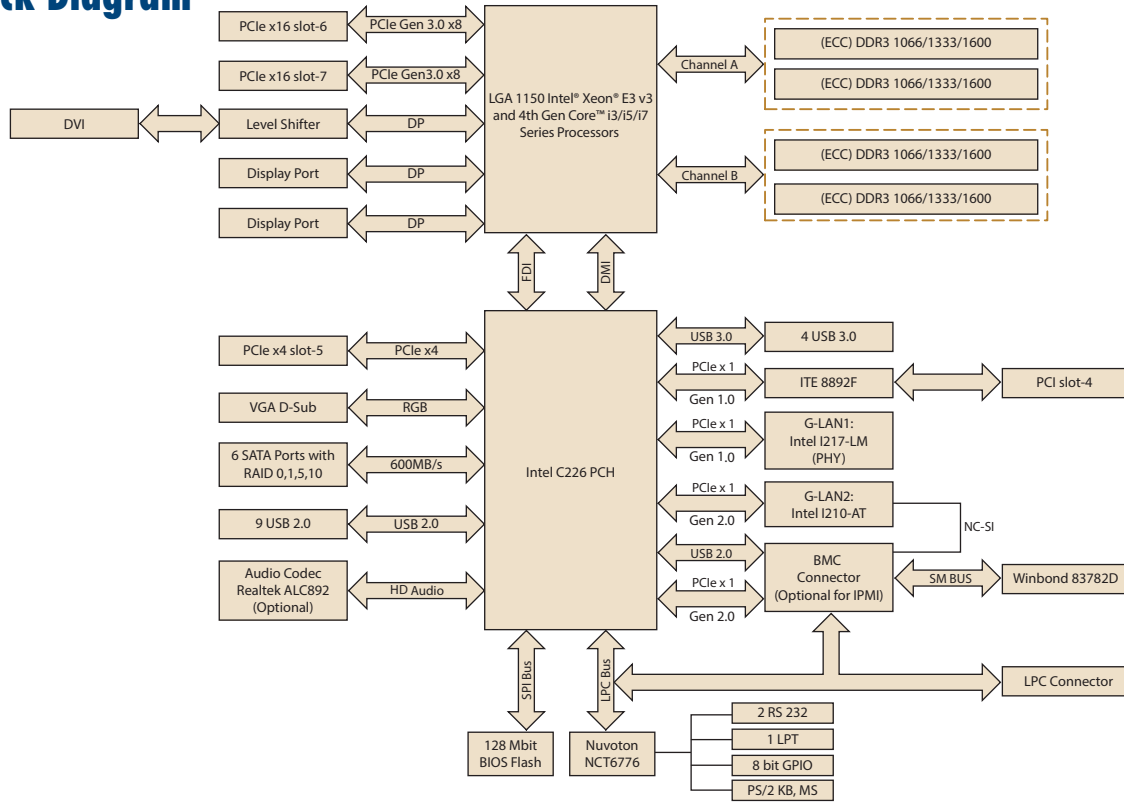


## Specifications

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				
	Total slots	4 (Dual Channel)				
Memory	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	Slot location 7	PCI x16 slot (Gen3 x8 link)				
	Controller	Intel HD Graphics				
Storage	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed				
	SATA controller	Intel C226: 6 SATA3 6 Gb/s ports with Intel Matrix Storage support (for Windows only) (Supports software RAID 0, 1, 10 & 5)				
Networking	SAS controller	-				
	Interface	10/100/1000 Mbps				
	Controller	GbE LAN1: Intel I217-LM; GbE LAN2: Intel I210-AT				
Onboard I/O Connectors	Connector	RJ-45 x 2				
	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 Connectors	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		-				
Watchdog Timer	Audio	2 (Mic-in, Line-out)				
	Output	System reset				
Power Requirement	Interval	Programmable 1 – 255 sec				
	Power On	Intel LGA1150 2.6GHz; DDR3 4G x4				
Environment	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
	Operating	Non-operating				
Humidity	Temperature	0 – 60° C (32 – 140° F)		-40 – 85° C (-40 – 185° F)		
	Humidity	Depends on CPU speed and cooler solution		5% – 95% (Non-condensing)		
Physical Characteristics	Dimensions	244 x 244 mm (9.6" x 9.6")				

\*Memory ECC function enable or not depends on processor supporting.

### 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
2066S58410	Startup manual	x 1
1700003194	SATA data cables	x 2
1700022749-11	SATA power cables	x 2
19Z0000470T000	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 (TDP up to 95W)
1960049408N001	LGA 1151/1150/1155 1U CPU Cooler (TDP up to 95W)
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
968EMLSAP2	SUSIAccess Pro 3.0
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

### I/O View



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



ASMB-584VG-00A1E

Note 1: It's a must to install PCA-TPM-00A1E for enabling Intel vPro feature. 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.