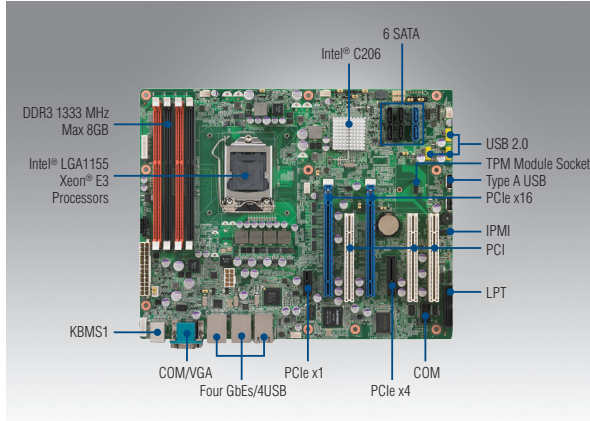


ASMB-781

LGA 1155 Intel® Xeon® E3 ATX Server Board with 1 PCIe x16 or 2 PCIe x8, Quad LANs



Features

- ATX server board with 2nd Core i processor, quad LANs and high thermal performance
- LGA 1155 Intel® Xeon® E3 and 2nd Core™ i3 / Pentium processors
- DDR3 1066/1333 MHz ECC UDIMM up to 32GB
- One Gen 2.0 PCIe x16 or two PCIe x8 slots
- Quad LANs with teaming function
- Rackmount optimized placement for thermal green design
- Supports IPMI, Embedded software APIs and utilities

Software APIs:



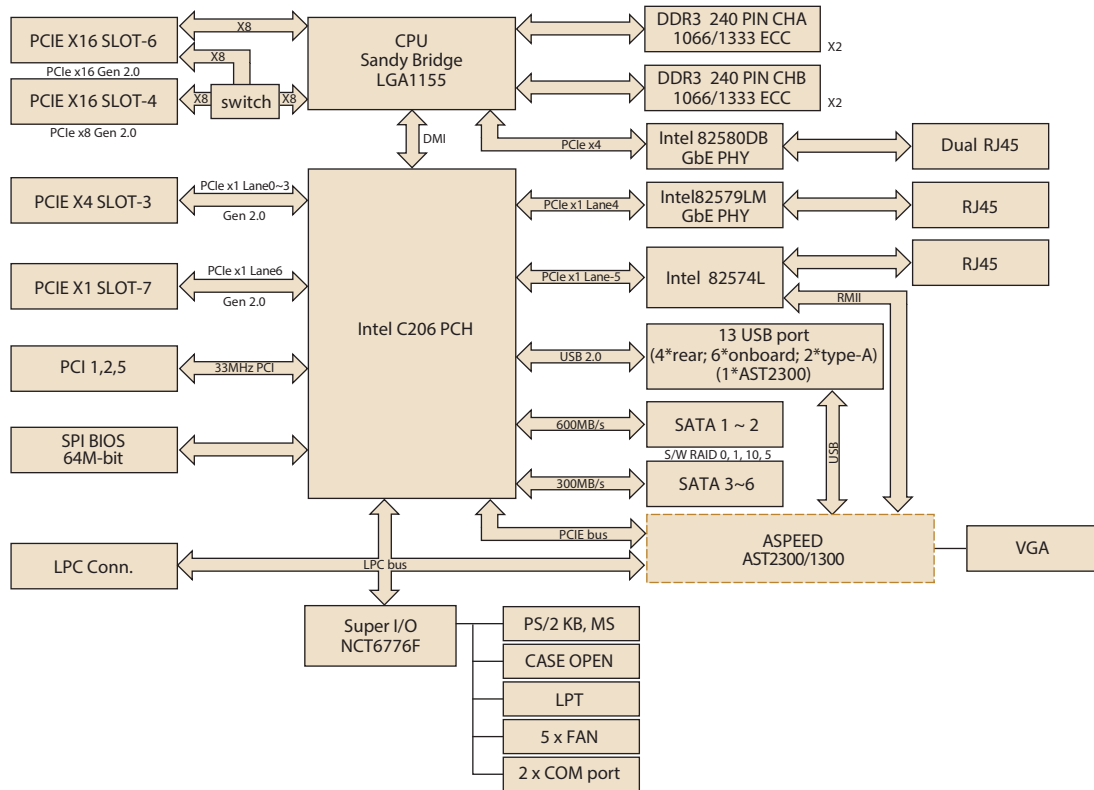
Utilities:



Specifications

Form Factor	ATX form factor						
Processor System	CPU	Xeon E3-1275	Xeon E3-1225	Core i3-2120	Pentium G850	Celeron G540	
	Cores/Thread	4/8	4/4	2/4	2/2	2/2	
	Speed	3.4	3.1	3.3	2.9	2.5	
	L3 Cache	8 MB	6 MB	3 MB	3 MB	2 MB	
	Socket	LGA 1155					
	Chipset	Intel C206 chipset					
	BIOS	AMI 64 Mbit SPI (UEFI)					
Memory	Technology	Dual Channel DDR3 ECC/Non-ECC 1066/1333/1600 MHz					
	Max. Capacity	32 GB					
	Socket	4 x 240-pin DIMM					
	Memory size	1 GB, 2 GB, 4 GB, 8 GB					
Expansion Slots	PCI 32-bit/33 MHz	3 slots					
	PCIe x 1 500 MB/s per direction	1 slot					
	PCIe x 4 2.0 GB/s per direction	1 slot					
	PCIe x16 8 GB/s per direction	2 slot(Auto switch to x8 link if slot 4 is occupied)					
Graphics	Controller	AST2300/1300					
	VRAM	DDR3 512 Mbit (64 MB)					
Storage	SATA controller	Intel C206: 4 SATA2 3 Gb/s ports, 2 SATA3 6Gb/s Intel Matrix Storage (for Windows only) (Supports software RAID 0, 1, 10 & 5)					
	SAS controller	-					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel 82579LM; GbE LAN2: Intel 82574L; GbE LAN3/4: Intel 82580DB (Optional)					
	Connector	RJ-45 x 4 for G4 version					
Internal Connectors	Parallel connector	1					
	PSU connector	24-pin SSI power connector + 8-pin SSI 12 V power connector					
	USB connector	3 (supports 6 USB port), 2* Type-A					
	Fan header	5 x 4pin					
	SMBus	1					
	Chassis intruder	1					
	Front LAN LED	2					
	Serial port header	1 (RS-232)					
Rear I/O Connectors	External serial port	1 (RS-232), COM1 don't support wake on modem					
	External USB port	4					
	VGA port	1					
	RJ-45	2 for G2 version, 4 for G4 version					
	PS/2 KB/mouse	2					
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	-V12
		2.74 A	1.12 A	0.08 A	4.86 A	1.81 A	0.01 A
Environment	Temperature	Operating			Non-operating		
		0 ~ 60° C (32 ~ 140° F)			-40 ~ 85° C (-40 ~ 185° F)		
		Depends on CPU speed and cooler solution					
Physical Characteristics	Humidity	0% ~ 90%			5% ~ 95% (Non-condensing)		
		Dimensions	304.8 x 244 mm (12" x 9.6")				

Block Diagram



Ordering Information

Part Number	Chipset	Memory	LAN	IPMI	Graphic
ASMB-781G2-00A1E	C206	DDR3 ECC UNB/ Non-ECC UNB	2	-	AST1300
ASMB-781G4-00A1E	C206	DDR3 ECC UNB/ Non-ECC UNB	4	Yes	AST2300

Packing List

Part Number	Description	Quantity
2066078100	Driver CD	x 1
2006078110	Startup manual	x 1
1700003194	SATA data cables	x 2
1703150102	SATA power cables	x 2
1960052312T000	I/O shield	x 1

Bracket View



ASMB-781G4-00A1E



ASMB-781G2-00A1E

Optional Accessories

Part Number	Description
1700002204	Dual port USB cable (27 cm) with bracket
1700008461	Four port USB cable (30.5 cm) with bracket
1960047669N001	LGA 1155/1156 CPU cooler for 4U and wallmount chassis
1960052651N001	LGA 1155/1156 CPU cooler for 2U and rackmount chassis
1960047831N001	LGA 1155/1156 CPU cooler for 2U and rackmount chassis
1960049408N001	LGA 1155/1156 1U CPU Cooler and supports up to 73W processor
1700008809	Printer port cable kit
1701090401	COM port cable with bracket
PCA-AUDIO-HDA1E	HD Audio-card
1920000406T000	I/O shield for ACP-1320 chassis
PCA-TPM-00A1E	TPM Module with Infineon TPM 1.2 solution

Note 1: Please order 1 piece of each 1960049408N001 and 1920000406T000 for configuring ASMB-781 with ACP-1320 chassis.

Note 2: Purchasing ASMB-781's proprietary CPU cooler from Advantech is a must. Other brands' CPU coolers are NOT compatible with ASMB-781.