TECH4U-610-787

LGA 1200 Intel® Xeon® W & 10th Gen. Core™ ATX Server Board with 4 x DDR4, 5 x PCIe, 2 x PCI, 4 x USB 3.2, 5 x SATA 3, Quad/Dual LANs, and IPMI

BIS Regn.No. R-85000140

Conforming to BIS Standard IS 13252 (Part-1): 2010

Features

- LGA 1200 Intel® Xeon® W & 10th Gen. Core™ i9/i7/i5/i3 processors with W480E chipset.
- DDR4 2933/2666/2400 MHz ECC/Non-ECC UDIMM up to 128 GB.
- One PCIe x16 link (or two x8 link), two PCIe x4, and one PCIe x1 slots.
- Triple displays - DVI-D, VGA, and HDMI 2.0 ports.
- Five SATA 3 ports and four x USB 3.2 ports.
- One M.2 2280/2242 (SATA / PCIe compatible).
- Supports 400 W ATX PFC PS/2 power supply.
- Easy to install front-accessible drive bays to hold three 5.25" and one 3.5" disk drives.
- Front-accessible USB & PS/2 interfaces.
- Designed to withstand environmental extremes, such as shock, vibration and high temperature.
- Front LEDs indicate power status, and HDD activity.
- Lockable front door prevents unauthorized access.
- Supports Internal 5.25" DVD-RW.

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

Specifications

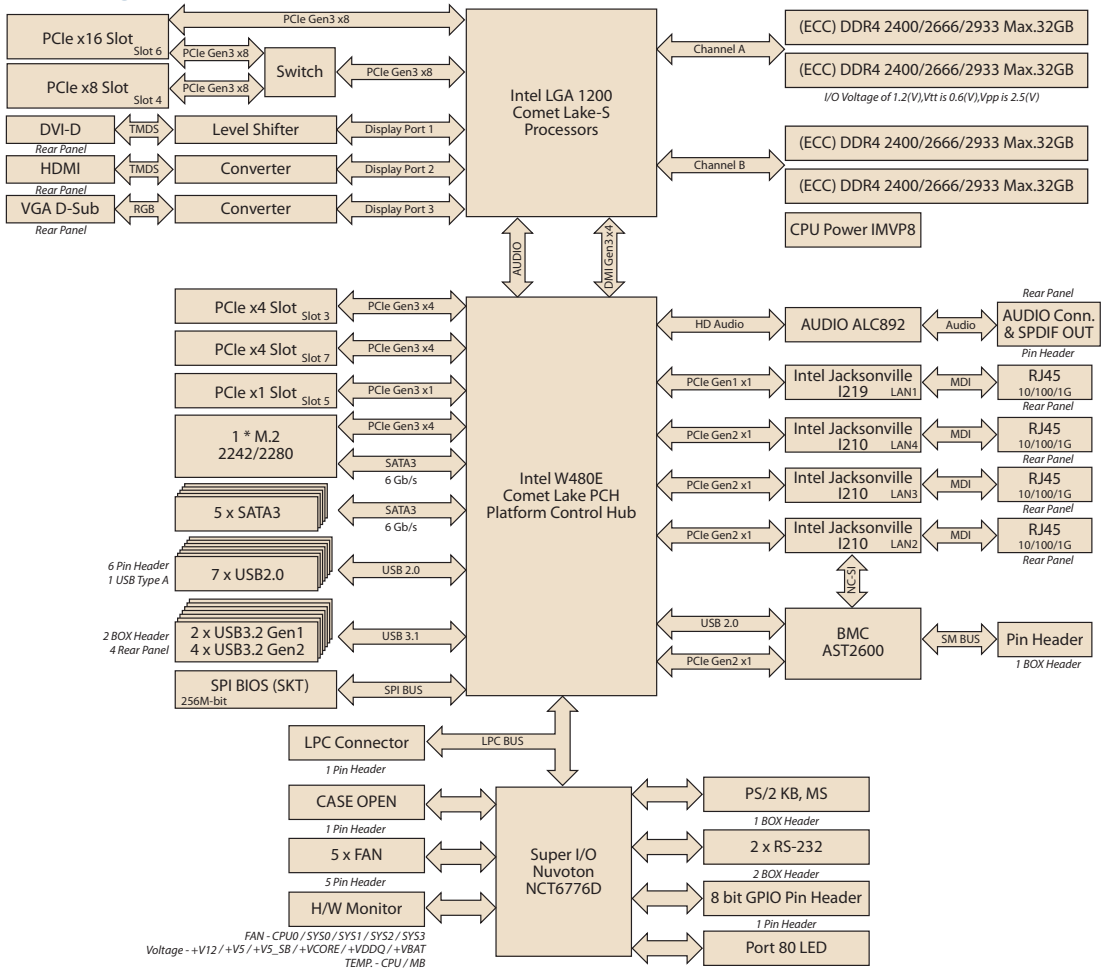
Form Factor		ATX form factor					
Processor System	Socket	Intel® LGA 1200					
	CPU type	Intel® Xeon® W-1270x/W-1290x and 10th Generation Core™ i3/i5/i7/i9 series (TDP up to 125W)					
Core Logic	Chipset	Intel W480E chipset					
Memory	Total slots	4 x (Dual Channel)					
	Max. capacity	128 GB					
	Memory type	DDR4 ECC/Non-ECC 2933/2666/2400 MHz UDIMM (288-pin)*					
	Memory size	4 GB, 8 GB, 16 GB, 32GB					
Expansion Slots	Total PCI/PCIe slots	7					
	Slot location 1	PCI slot					
	Slot location 2	PCI slot					
	Slot location 3	PCIe x4 slot (Gen3 x4 link)					
	Slot location 4	PCIe x8 slot (Gen3 x8 link)					
	Slot location 5	PCIe x1					
	Slot location 6	PCIe x16 slot (Gen3 x8 or x16 link)					
	Slot location 7	PCIe x4 slot (Gen3 x4 link)					
Graphics	Controller	Intel® HD Graphics**					
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed					
Storage	SATA controller	Intel® W480E: 8 SATA 3 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 x USB 3.2 Gen 1 (2 ports), 3 x USB 2.0 (6 ports), 1 x USB Type-A					
	M.2 connector	1 x M.2 2280/2242 (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 connector	1 x (ALC 892)					
	PS/2 KB/Mouse	1 x (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 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 port	1 x (Resolution up to 4096 x 2160 @ 60 Hz)					
	RJ-45	2 x for G2 version; 4 for G4 version					
	Audio connector	2 x (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	$5V_{SB}$	-12 V
	(Xeon W-1290E 3.5GHz DDR4 2666 32G*4)	1.69A	1.68A	0.31A	9.25A	0.1A	0.01A
Environment		Operating			Non-operating		
	Temperature	0 ~ 60° C, depends on CPU speed and cooler solution			-40 ~ 85° C		
	Humidity	0% ~ 95%			5% ~ 95% (Non condensing)		
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 446 mm (19" x 7" x 17.6")					

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

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

All product specifications are subject to change without notice

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	LAN	SATAIII	IPMI
TECH4U-610-787	W480E	DDR4 Non-ECC/ECC UDIMM	VGA + DVI-D + HDMI	2/4	5	-

Motherboard can fit in 450 mm (17.7") depth

Bracket View