

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



CE FCC

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.**

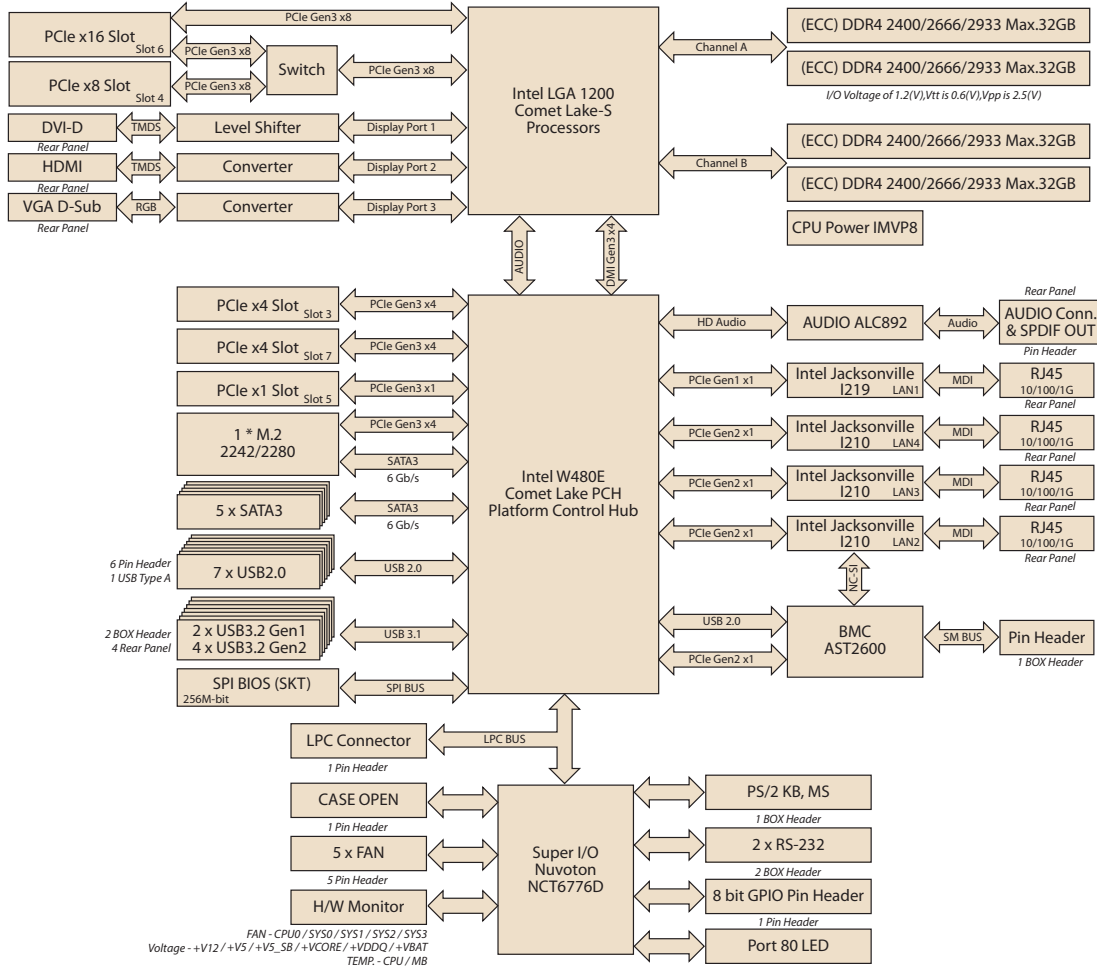
Specifications

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)					
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: 8 SATA 3 6 Gb/s ports with Intel Rapid Storage Technology support (for Windows only) (Supports software RAID 0, 1, 10 & 5)					
Networking	SAS controller	-					
	Interface	10/100/1000 Mbps					
Onboard I/O Connector	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					
Rear 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)					
Watchdog Timer	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	-					
Power Requirement	Output	System reset					
	Interval	Programmable 1 ~ 255 sec					
Environment	Power On	3.3 V	5 V	12 V	12V_8P	5 V _{SB}	-12 V
	(Xeon W-1290E 3.5GHz DDR4 2666 32G*4)	1.69A	1.68A	0.31A	9.25A	0.1A	0.01A
Physical Characteristics	Operating	Non-operating					
	Temperature	0 ~ 60° C, depends on CPU speed and cooler solution					-40 ~ 85° C
	Humidity	0% ~ 95%					5% ~ 95% (Non condensing)
	Dimensions (W x H x D)	482 x 177 x 479 mm (19" x 7" x 18.9")					

* 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.

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	-



HDD LED Power switch
USB & PS/2 Power LED

Easy-to-maintain cooling fan
System reset switch



One 3.5" drive bay Three 5.25" drive bays
One internal 3.5" drive bay space



Motherboard can fit in 450 mm (17.7") depth

Bracket View

