

# TECH4U-610-787

**LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3 ATX with DP/DVI/VGA, DDR4, USB 3.2, M.2**



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



CE FCC

## Specifications

Processor System	CPU	i9-10900E	i9-10900TE	i7-10700E	i7-10700TE	i5-10500E	i5-10500TE	i3-10100E	i3-10100TE	
	Base Frequency	2.8 GHz	1.8 GHz	2.9 GHz	2.0 GHz	3.1 GHz	2.3 GHz	3.2 GHz	2.3 GHz	
	L3 Cache	20 MB	20 MB	16 MB	16 MB	12 MB	12 MB	6 MB	6 MB	
	Cores	10	10	8	8	6	6	4	4	
	TDP	65 W	35 W	65 W	35 W	65 W	35 W	65 W	35 W	
	Socket	LGA1200								
	Chipset	Q470E								
	BIOS	AMI 256 Mbit SPI								
	Expansion Slot	PCI	2 (32-bit/33 MHz)							
PCIe x4 (Gen 3)		4 (3 x link x4, 1 x link x1)								
PCIe x16 (Gen 3)		1								
Memory	Technology	Dual Channel (Non-ECC) DDR4 2400/2666/2933								
	Max. Capacity	128 GB								
	Socket	4 x 288-pin DIMM								
Graphics	Controller	Intel HD Graphics								
	VRAM	1 GB maximum shared memory with 2 GB and above system memory installed								
Ethernet	Interface	10/100/1000 Mbps								
	Controller	GbE LAN1: Intel I219-LM, GbE LAN2: Intel I210-AT								
	Connector	2 x RJ-45								
SATA	Max Data Transfer Rate	600 MB/s								
	Channel	4								
	RAID	0,1,5,10								
Rear I/O	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)								
	DVI-D	1 (Resolution up to 1920 x 1200 @ 60 Hz)								
	DisplayPort	1 (Resolution up to 4096 x 2304 @ 60 Hz)								
	Ethernet	2								
	USB	8 (2 x USB 3.2 Gen 2, 2 x USB 3.2 Gen 1, 4 x USB 2.0)								
	Audio	2 (Line-out, Mic-in)								
	Serial	1 (RS-232)								
Internal Connectors	USB	6 (2 x USB 3.2 Gen 1 via header, 2 x USB 2.0 via header, 2 x USB 2.0 Type-A connector)								
	Serial	5 (4 x RS-232, 1 x RS-232/422/485)								
	SATA	4								
	M.2	1 (PCIe x4 M-key 2280 type)								
	Parallel	1								
	GPIO	8-bit								
	PS/2 KB/Mouse	1 (Optional PS/2 KB/Mouse Cable is required)								
Watchdog Timer	Output	System reset								
	Interval	Programmable 1 ~ 255 sec								
Power Requirement	Power On	Intel Core i5-10500E; DDR4 32 GB x 4								
	Voltage	+12V	+5V		+3.3V	+5Vsb			-12V	
	Current	7.58A	1.92A		0.87A	0.14A			0.08A	
Environment		Operating							Non-Operating	
	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal solution							-40 ~ 85 °C (-40 ~ 185 °F)	
	Humidity	40 °C @ 95% RH Non-condensing							60 °C @ 95% RH Non-condensing	
Physical Characteristics	Dimensions (W x H x D)	482 x 177 x 466 mm (19" x 7" x 17.6")								

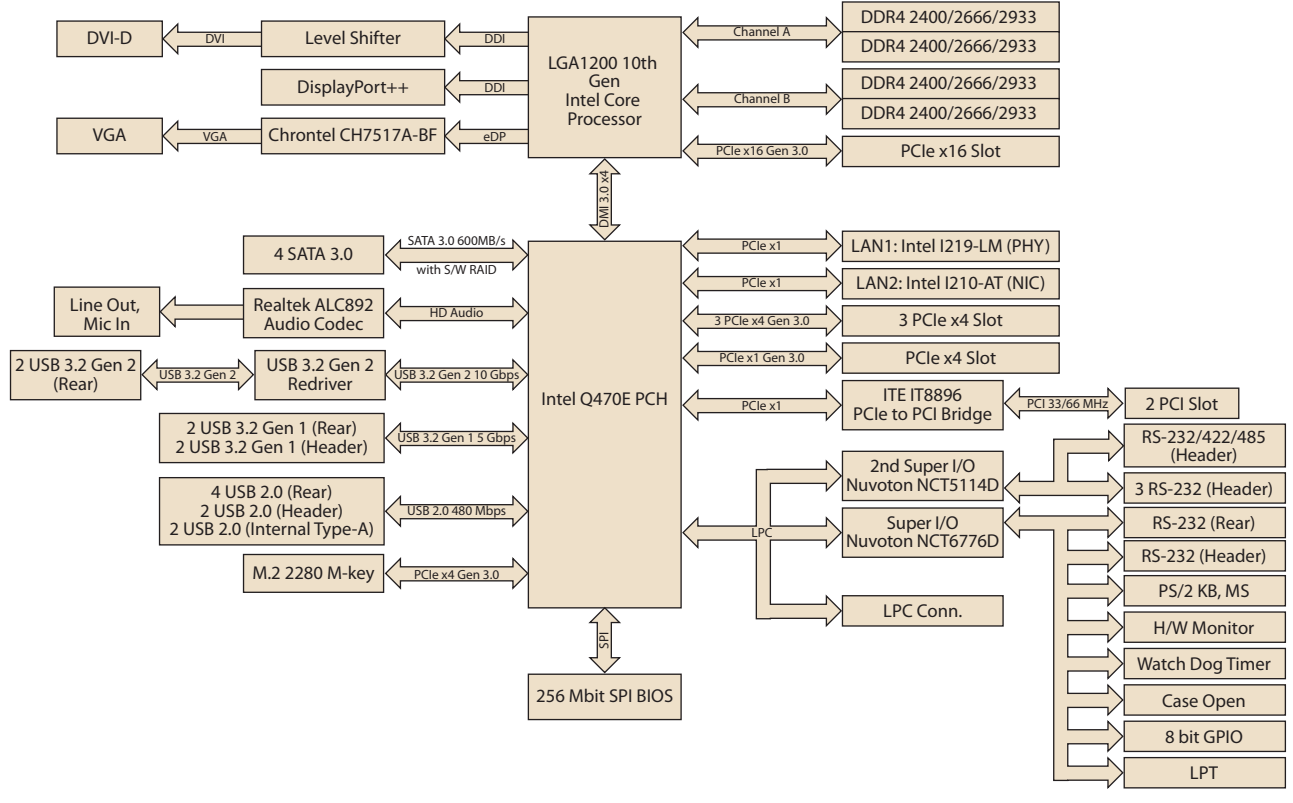
## Features

- Intel® 10th generation Core™ i9/i7/i5/i3 processor with Q470E chipset
- Four DIMM sockets up to 128 GB DDR4 2933
- Triple display DP/DVI-D/VGA and dual GbE LAN
- M.2, SATA RAID 0, 1, 5, 10, USB 3.2
- Supports Intel vPro, AMT & TPM technologies
- Supports 400 W ATX PFC PS/2 power supply
- Easy to install front-accessible drive bays to hold three 5.25" and two 3.5" disk drives (one front-accessible & one internal).
- Front-accessible USB & PS/2 interfaces.
- Front LEDs indicate power status, and HDD activity.
- Lockable front door prevents unauthorized access.
- Supports Internal 5.25" DVD-RW.

**Note 1: TPM module is required to enable Intel vPro and TPM technologies.**

**Note 2: Legacy platform is not supported.**

### Block Diagram



### Ordering Information

Part Number	Chipset	Memory	Display	USB 3.2 Gen 2	USB 3.2 Gen 1	USB 2.0	COM	GbE LAN	AMT	M.2	SATA 3.0	SW RAID
TECH4U-610-787	Q470E	Non-ECC DDR4 2400/2666/2933 up to 128 GB	VGA + DVI-D + DP	2	4	8	6	2	Yes	1	4	Yes



HDD LED Power switch  
USB & PS/2 Power LED



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

