

TECH4U-610-706

LGA1151 8th/9th Generation Intel® Core™ i7/i5/i3 ATX with DVI/VGA, DDR4, SATA 3.0, USB 3.1 & 6 COMs



BIS
Regn.No.
R-85000140

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



CE FCC

Features

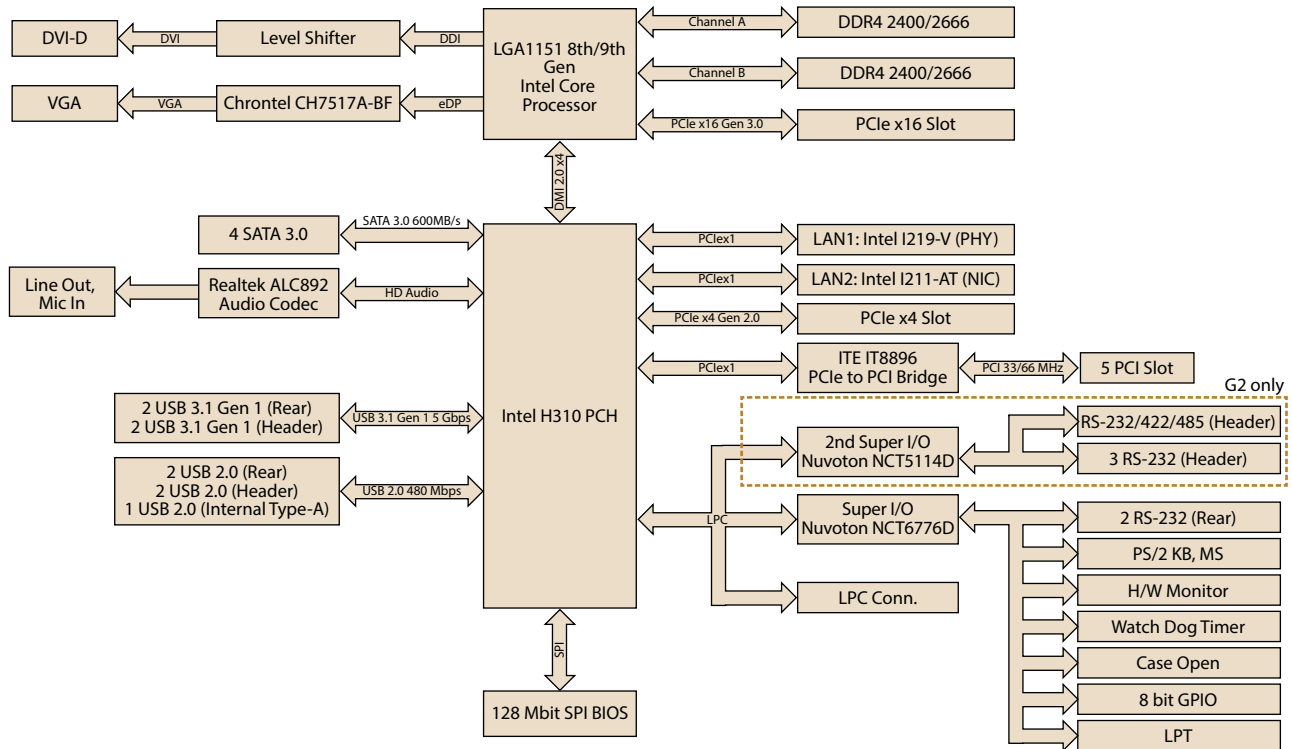
- Intel® 8th/9th generation Core™ i7/i5/i3 processor with H310 chipset
- Dual channel (Non-ECC) DDR4 2400/2666 up to 32GB
- Support VGA and DVI display
- SATA 3.0, USB 3.1, dual GbEs
- 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen 3) and 1 PCIe x4 (Gen 2), and 5 PCI expansion slots
- Supports 400 W ATX PFC PS/2 power supply.
- Easy to install front-accessible drive bays to hold three 5.25" and two 3.5" drives (one front-accessible & one internal).
- 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: Intel 8th/9th generation processors only support Windows 10 (64-bit).

Specifications

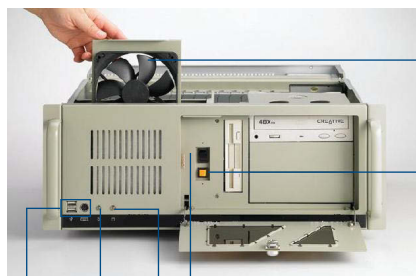
		i7-9700	i7-8700	i5-9500	i5-8500	i3-9100	i3-8100
Processor System	CPU	i7-9700	i7-8700	i5-9500	i5-8500	i3-9100	i3-8100
	Speed	3.0GHz	3.2 GHz	3.0 GHz	3.0 GHz	3.6 GHz	3.6 GHz
	L3 Cache	12 MB	12 MB	9 MB	9 MB	6 MB	6 MB
	Cores	8	6	6	6	4	4
	TDP	65 W	65 W	65 W	65 W	65 W	65 W
	Socket	LGA1151					
Expansion Slot	Chipset	Intel H310					
	BIOS	AMI 128Mbit SPI Flash					
	PCI	32-bit/33 MHz, 5 slots					
	PCIe x4 (Gen 2)	2 GB/s per direction, 1 slot					
Memory	PCIe x16 (Gen 3)	16 GB/s per direction, 1 slot					
	Technology	Dual Channel(Non-ECC) DDR4 2400/2666 32 GB					
	Max Capacity	(16 GB per DIMM)					
Graphics	Sockets	2 x 288-pin DIMM					
	Controller	Chipset integrated Intel HD Graphics Shared					
Ethernet	VRAM	system memory is subject to OS					
	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT 2 x					
SATA	Connector	RJ-45					
	Max Data Transfer Rate	600 MB/s					
Rear I/O	Channel	4					
	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)					
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60 Hz)					
	Ethernet	2 for G2 version; 1 for VG version					
	USB	4 (2 x USB 3.1 Gen 1, 2 x USB 2.0)					
	Audio	2 (Line-out, Mic-in)					
	Serial	2 (RS-232)					
Internal Connectors	PS/2	2 (1 x keyboard and 1 x mouse)					
	USB	5 (2 x USB 3.1 Gen 1 via header, 2 x USB 2.0 via header, 1 x USB 2.0 Type-A connector)					
	Serial	4 for G2 version (3 x RS-232, box-header; 1 x RS-232/422/485 with auto-flow control, box-header)					
	SATA	4					
	Parallel	1					
Watchdog Timer	GPIO	8-bit					
	Output	System reset					
Power Requirement	Interval	Programmable 1 - 255 sec					
	Test Environment	Intel Core i7-8700 3.2GHz; DDR4 2400 16 GB x 2					
	Voltage	3.3V	5V	12V	5Vsb	-5V	-12V
Environment	Current	2.74A	3.5A	5.92A	0.05A	0.01A	0.08A
	Operating						
Physical Characteristics	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and system thermal					
	Humidity	solution 40 °C @ 95% RH Non-condensing					
Physical Characteristics	Non-Operating						
	Dimensions (W x H x D)	482 x 177 x 466 mm (19" x 7" x 17.6")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.1 Gen 1	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
TECH4U-610-706	H310	Non-ECC	VGA + DVI	4	5	6	2	No	4	No	No



Easy-to-maintain cooling fan

System reset switch

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

