

TECH4U-610-705

LGA1151 6th/7th Gen. Intel® Core™ i7/i5/i3 ATX with DVI/VGA, DDR4, SATAIII, USB 3.0 & 6 COMs



BIS
Regn.No.
R-85000140

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



CE FCC

Specifications

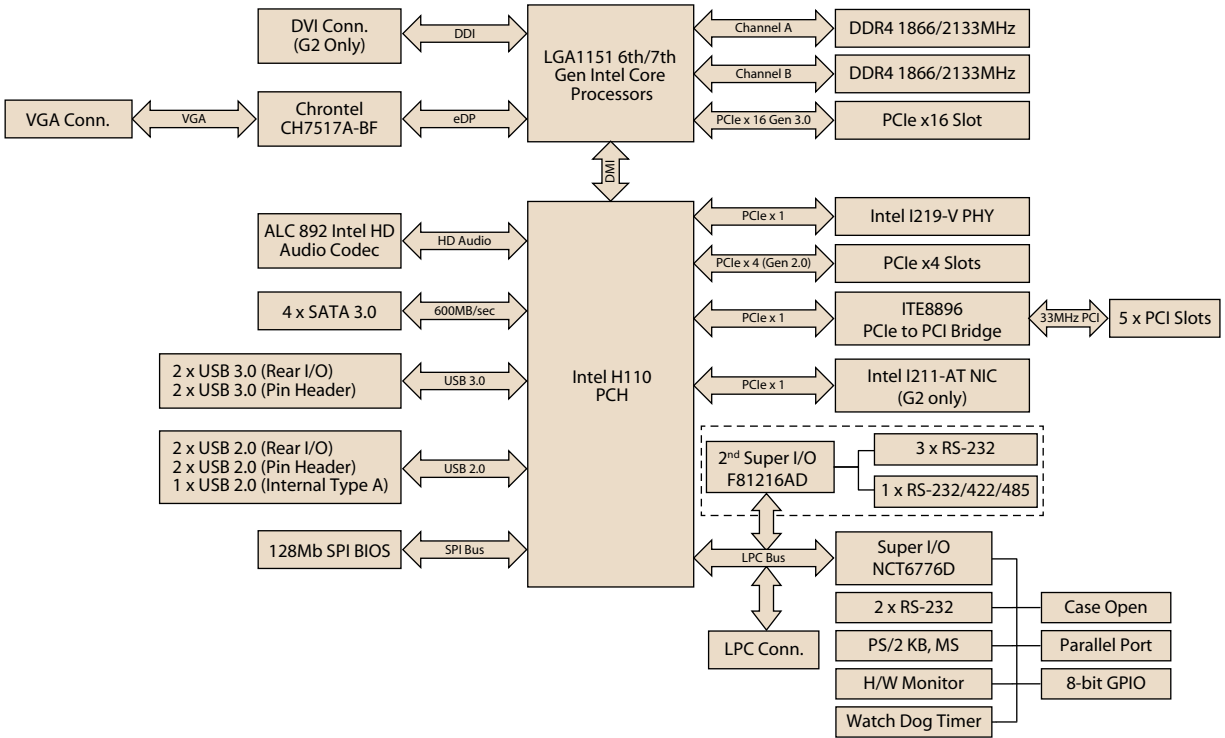
Features

- Intel 6th/7th generation Core i7/i5/i3/pentium processors.
- Dual channel (Non-ECC) DDR4 1866/2133 up to 32GB
- Support VGA and DVI display
- Support SATA3.0, USB3.0, dual GbEs
- Support 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen3) and 1 PCIe x4 (Gen2), 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 7th generation processors only support Windows 10 (64-bit).

Processor System	CPU	i7-7700	i7-6700	i5-7500	i5-6500	i3-7100	i3-6100
	Speed	3.6GHz	3.4 GHz	3.4GHz	3.2 GHz	3.9GHz	3.7 GHz
	Cache	8MB	8MB	6MB	6MB	3MB	3MB
	Socket	LGA 1151					
	Chipset	Intel H110					
	BIOS	AMI 128Mbit SPI Flash					
	PCI	32-bit/33 MHz, 5 slots					
Expansion Slot	PCIe x4 (Gen2)	2 GB/s per direction, 1 slot					
	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot					
	Technology	Dual Channel(Non-ECC) DDR4 1866/2133 MHz					
Memory	Max Capacity	32 GB (16 GB per DIMM)					
	Sockets	DDR4 288-pin DIMM x2					
	Controller	Chipset integrated Intel HD Graphics					
Graphics	VRAM	Shared system memory is subject to OS					
	Interface	10/100/1000 Mbps					
Ethernet	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT					
	Connector	RJ-45 x2					
	Max Data Transfer Rate	600 MB/s					
Rear I/O	SATA Channel	4					
	VGA	1 (Resolution up to 1920 x 1200 @ 60Hz)					
	DVI	1 for G2 version (Resolution up to 1920 x 1200 @ 60Hz)					
	Ethernet	2 for G2 version; 1 for VG version					
	USB	4 (USB3.0 x2, USB2.0 x2)					
	Audio	Line-out, Mic-in					
	Serial	2					
Internal Connectors	PS/2	2 (1 x keyboard and 1 x mouse)					
	USB	1 (Type A); 2 (USB2.0, Pin-header); 2 (USB3.0, Box-header)					
	Serial	4 for G2 version (3 x RS-232, box-header; 1 x RS-232/422/485 with auto-flow control, box-header)					
	Parallel	1					
	GPIO	8 bits					
Watchdog Timer	Output	System reset					
	Interval	Programmable 1 - 255 sec					
Power Requirement	Test Environment	Intel Core i7-6700 3.4GHz; DDR4 2133 8GB x 2					
	Voltage	3.3V	5V	12V	5Vsb	-5V	-12V
	Current	0.49A	3.13A	7.88A	0.08A	0.07A	0.07A
Environment	Operating					Non-Operating	
	Temperature	0 ~ 60 °C (32 ~ 140 °F), depends on CPU speed and cooler 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")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0	USB 2.0	COM	GbE LAN	AMT	SATA	SW RAID	Intelligent System Module Support
TECH4U-610-705	H110	Non-ECC	VGA + DVI	4	5	6	2	No	4	No	No



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

