

TECH-7120-705

LGA1151 6th/7th Generation Intel® Core™ i7/i5/i3/ ATX with DVI/VGA, DDR4, SATA III, USB 3.0 & 6 COMs



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



CE FCC

Features

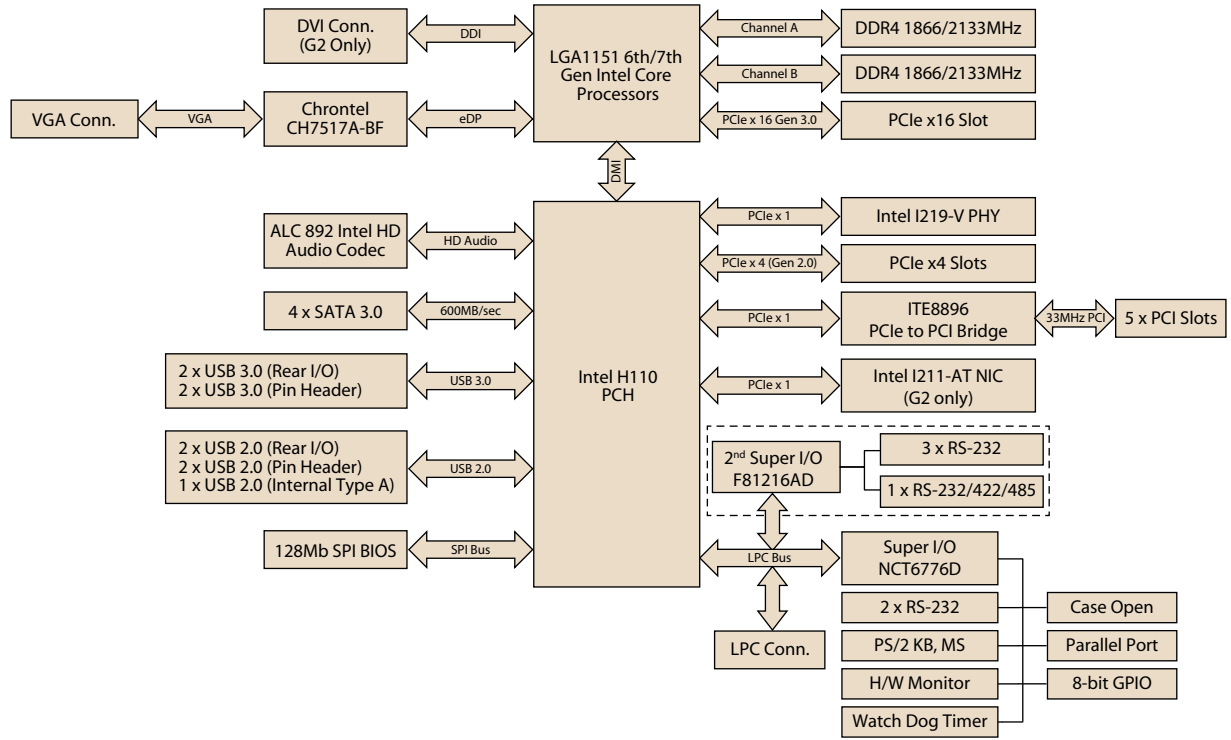
- * Intel® 6th/7th generation Core™ i7/i5/i3/Pentium®/Celeron® processor
- * Dual channel (Non-ECC) DDR4 1866/2133 up to 32GB
- * Supports VGA and DVI display
- * Supports SATA3.0, USB3.0, dual GbEs
- * Supports 5 RS-232 and 1 RS-232/422/485 serial ports
- * 1 PCIe x16 (Gen3) and 1 PCIe x4 (Gen2), and 5 PCI expansion slots
- * Supports 350 W ATX power supply.
- * Easy to install drive bays to hold one 5.25" and one 2.5/3.5" drives (HDD/SSD).
- * LED indicators for Power Status and HDD/SSD activity.
- * 5.25" Internal DVD-RW (Optional).

Note: Intel 7th generation processors only support Windows 10 (64-bit).

Specifications

Processor System	CPU	i7-7700	i7-6700	i5-7500	i5-6500	i3-7100	i3-6100
	Speed	3.6GHz	3.4GHz	3.4GHz	3.2GHz	3.9GHz	3.7GHz
	Cache	8 MB	8 MB	6 MB	6 MB	3 MB	3 MB
	Socket	LGA 1151					
	Chipset	Intel H110					
	BIOS	AMI 128Mbit SPI Flash					
	Expansion Slot	PCI	32-bit/33 MHz, 5 slots				
PCIe x4 (Gen2)		2 GB/s per direction, 1 slot					
PCIe x16 (Gen3)		16 GB/s per direction, 1 slot					
Memory	Technology	Dual Channel(Non-ECC) DDR4 1866/2133 MHz					
	Max Capacity	32 GB (16 GB per DIMM)					
	Sockets	DDR4 288-pin DIMM x2					
Graphics	Controller	Chipset integrated Intel HD Graphics					
	VRAM	Shared system memory is subject to OS					
Ethernet	Interface	10/100/1000 Mbps					
	Controller	GbE LAN1: Intel I219-V, GbE LAN2: Intel I211-AT					
	Connector	RJ-45 x2					
SATA	Max Data Transfer Rate	600 MB/s					
	Channel	4					
Rear I/O	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					
	PS/2	2 (1 x keyboard and 1 x mouse)					
Internal Connectors	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)	380 x 164 x 316.5 mm (15" x 6.5" x 12.5")					

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.0/2.0	COM	GbE LAN	PCIe x16	PCIe x4
TECH-7120-705	Intel H110	Non-ECC	VGA + DVI	6	4	2	Yes	Yes

Front View



Inside View



Easy-to-maintain fan filter



User-friendly mechanical design for installing an add-on card

Bracket View

