

TECH-7120-707

LGA1200 10th Generation Intel® Core™ i9/i7/i5/i3 ATX with DVI/VGA, DDR4, USB 3.2, M.2, 2 LANs & 6 COMs



**BIS
Regn.No.
R-85000140**

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



CE FCC

Features

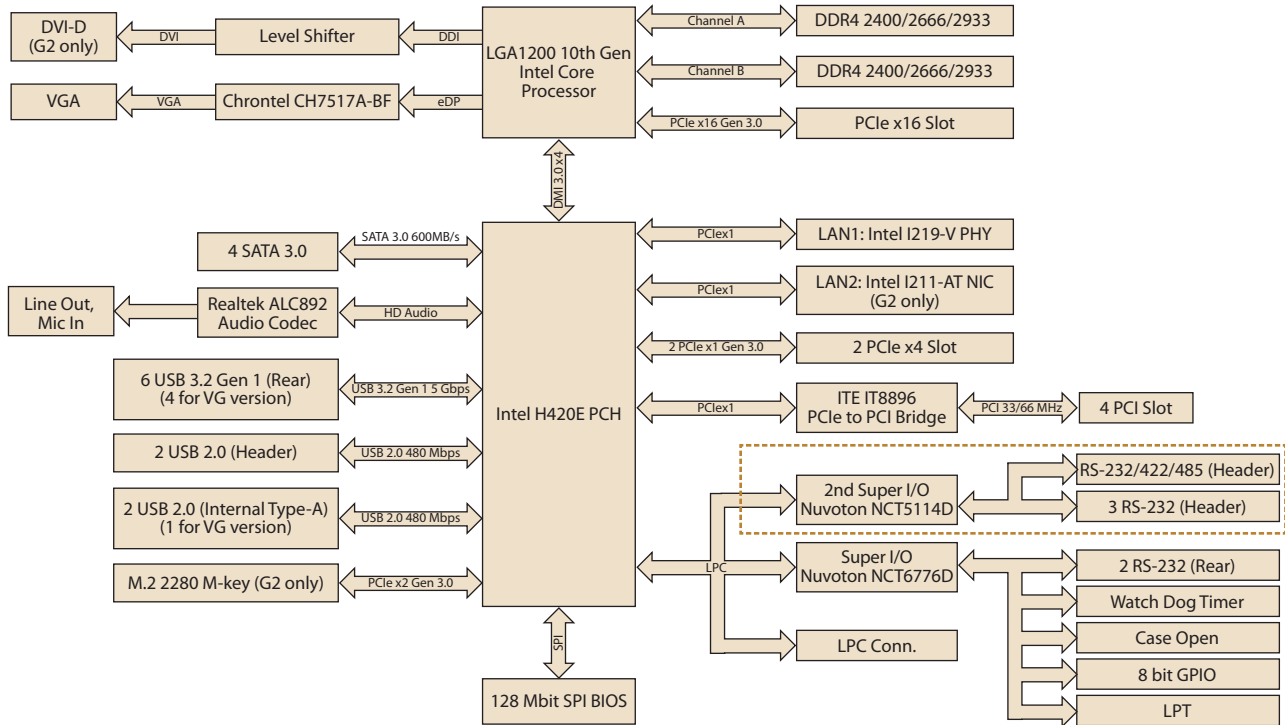
- Intel® 10th generation Core™ i9/i7/i5/i3 processor with H420E chipset
- Dual channel (Non-ECC) DDR4 2400/2666/2933 up to 64 GB
- Support VGA and DVI display
- M.2, SATA 3.0, USB 3.2, dual GbEs
- 5 RS-232 and 1 RS-232/422/485 serial ports
- 1 PCIe x16 (Gen 3) and 2 PCIe x4 (x1 Gen 3 link), and 4 PCI expansion slots.
- Supports 350W ATX power supply.
- Front LEDs indicate power status, and HDD activity.
- Supports Internal 5.25" DVD-RW (Optional).
- Easy to install drive bays to hold one 5.25" and one 2.5/3.5" drives (HDD/SSD).

Note: Legacy platform is not supported.

Specifications

	CPU	i9-10900E	i9-10900TE	i7-10700E	i7-10700TE	i5-10500E	i5-10500TE	i3-10100E	i3-10100TE	
Processor System	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	Intel H420E								
	BIOS	AMI 128Mbit SPI Flash								
Expansion Slot	PCI	4 (32-bit/33 MHz)								
	PCIe x4 (Gen 3)	2 (link x1)								
	PCIe x16 (Gen 3)	1								
Memory	Technology	Dual Channel(Non-ECC) DDR4 2400/2666/2933								
	Max Capacity	64 GB								
	Sockets	2 x 288-pin DIMM								
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	2 x RJ-45								
SATA	Max Data Transfer Rate	600 MB/s								
	Channel	4								
Rear I/O	VGA	1 (Resolution up to 1920 x 1200 @ 60 Hz)								
	DVI	1 (Resolution up to 1920 x 1200 @ 60 Hz)								
	Ethernet	2								
	USB	6 (USB 3.2 Gen 1)								
	Audio	2 (Line-out, Mic-in)								
	Serial	2 (RS-232)								
Internal Connectors	USB	4 (2 x USB 2.0 via header, 2 x USB 2.0 Type-A)								
	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								
	M.2	1								
	Parallel	1								
	GPIO	8-bit								
Watchdog Timer	Output	System reset								
	Interval	Programmable 1 - 255 sec								
Power Requirement	Test Environment	Intel Core i9-10900E; DDR4 32 GB x 2								
	Voltage	3.3V		5V		12V		5Vsb		-12V
	Current	0.72A		1.29A		6.5A		0.11A		0.04A
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)	380 x 164 x 316.5 mm (15" x 6.5" x 12.5")								

Block Diagram



Ordering Information

Part Number	Chipset	Memory	Display	USB 3.2 Gen 1	USB 2.0	COM	GbE LAN	AMT	M.2	SATA	SW RAID	Intelligent System Module Support
TECH-7120-707	H420E	Non-ECC	VGA + DVI	6	4	6	2	No	1	4	No	No

Front View



Inside View



Easy-to-maintain fan filter



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

Bracket View

