

TECH-4010-585

**Intel® Xeon® E3/ Core™ i7/i5/i3 LGA1151
MicroATX with DVI-D/HDMI/DP++/eDP/VGA,
6 COM, Dual LAN, SATA III, 10 USB3.0**



Features

- Supports Intel® Xeon®/ 6th & 7th Gen Core™ i7/i5/i3 processor with Q170/ C236 chipset
- Four DIMM sockets support up to 64 GB DDR4 2133 MHz SDRAM
- Supports DVI-D, HDMI, DP++, eDP, VGA (optional) display
- Supports Intel AMT 11.0 and Intel vPro competent
- Supports PCIe Gen3, upto 12 x USB 3.0, 4 x SATAIII and dual GbE LAN, mini-PCIe
- Supports Software RAID 0, 1, 5, 10, TPM 1.2/2.0 (optional)
- Supports WISE-PaaS and Embedded Software APIs
- Supports Redundant ATX power supply.
- Easy to install front-accessible drive bays to hold two 5.25" and two 3.5" disk drives.
- Front-accessible USB interfaces.
- LED indicators and alarm notification for system fault detection
- Low noise system fans
- Lockable front door prevents unauthorized access.

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

Specifications



Utilities:



BIOS flash Monitoring

Software APIs:



SMBus

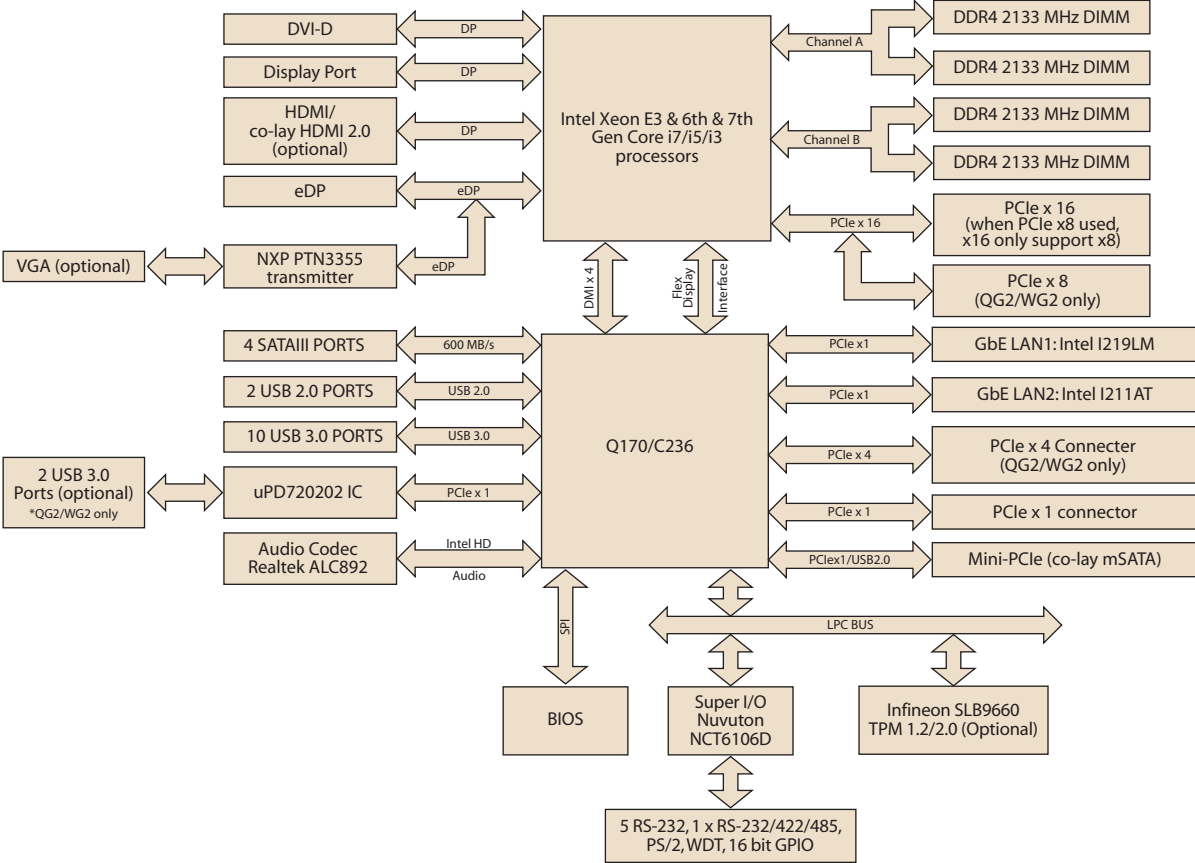
H/W Monitor

Watchdog

GPIO

	CPU	E3-1275 v6	E3-1275 v5	E3-1225 v5	E3-1268L v5	i7-7700 / i7-7700T	i7-6700 / i7-6700TE	i5-7500 / i5-7500T	i5-6500 / i5-6500TE	i3-7101E / i3-7101TE	i3-6100 / i3-6100TE	
Processor System	Core Number	4	4	4	4	4/4	4 / 4	4/4	4 / 4	2/2	2/2	
	Max. Speed	3.8GHz	3.6GHz	3.3GHz	2.4GHz	3.6GHz / 2.9GHz	3.4GHz / 2.4GHz	3.4GHz / 2.7GHz	3.2GHz / 2.3GHz	3.9GHz / 3.4GHz	3.7 GHz / 2.7GHz	
	Integrated Graphics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	L3 Cache	8M	8M	6M	8M	8M/8M	8M / 8M	6M/6M	6M / 6M	3M/3M	4M / 4M	
	TDP (W)	80W	80W	80W	35W	65W/35W	65W / 35W	65W/35W	65W / 35W	54W/35W	51W / 35W	
	Supports Model	WG2	WG2	WG2	WG2	QG2	QG2	QG2	QG2	QG2/WG2	QG2 / WG2	
Expansion Slot	Chipset	Q170/C236										
	BIOS	AMI EFI 128 Mbit SPI										
	PCIe x1 (Gen3)	1 GB/s per direction, 1 slot (Gen2 only)										
	PCIe x4 (Gen3)	4 GB/s per direction, 1 slot (Q170,C236 only)										
	PCIe x8 (Gen3)	8 GB/s per direction, 1 slot (Q170,C236 only)										
Memory	PCIe x16 (Gen3)	16 GB/s per direction, 1 slot (When x8 slot is used, x16 slot only offers x8 bandwidth automatically)										
	Technology	Dual Channel DDR4 2133 MHz SDRAM										
	Max. Capacity	64 GB/16 GB per DIMM										
	Socket	4 x 288-pin DIMM										
Graphics	Controller	Intel HD Graphics										
	VRAM	Supports DirectX11.1, OpenGL 5.0 and OpenCL 2.1										
	HDMI	1 GB maximum shared memory with 2 GB and above system memory installed										
	VGA	Supports max resolution HDMI 1.2 1920 x 1200 @ 60 Hz (Colay HDMI 2.0,4096 x 2160 @ 60 Hz, optional)										
	DVI-D	Max resolution 1920 x 1200 @ 60 Hz (on board) (optional)										
	eDP	Supports max. resolution 1920 x 1200 @ 60 Hz										
	Display Port	Internal pin header, supports max. resolution 3840 x 2160 @ 60 Hz (on board)										
	Triple Display	Supports max resolution 4096 x 2304 @ 60 Hz										
Ethernet	Dual Display	eDP/ VGA + DP** + HDMI, eDP/ VGA + HDMI + DVI-D, DP** + eDP/ VGA + DVI-D, DVI-D + DP** + HDMI										
	Interface	DP** + HDMI, DP** + DVI-D, DP** + eDP/ VGA, HDMI + DVI-D, HDMI + eDP/ VGA, eDP, VGA + DVI-D										
SATA	Controller	10/100/1000 Mbps										
	Connector	GbE LAN1: Intel I219LM, GbE LAN2: Intel I211AT										
	Max Data Transfer Rate	RJ-45 x 2										
Rear I/O	Channel	600 MB/s (SATA 3.0)										
	DVI-D	4										
	Display Port	1										
	HDMI	1										
	Ethernet	2										
	USB	8 (6 x USB 3.0, 2 x USB 2.0)										
	Audio	2 (Mic-in/ Line-out) (Mic-in could be configured as "Line-in" under Win OS.)										
Internal Connector	Serial	1 (RS-232)										
	USB 3.0	4										
	Serial	5 (4 x RS-232, 1 x RS-232/422/485 to support auto flow control)										
	VGA	1 (optional)										
	SATA	4 (SATA 3.0)										
	Extended Display Port (eDP)	1										
	JTAG	1										
	mini-PCIe	1 Full-size colay mSATA										
Watchdog Timer	GPIO	16-bit GPIO										
	Output Interval	System reset										
Power Requirements	Power On	Programmable 1 ~ 255 sec/min										
	Power On	Intel Core i7-6700 3.4 GHz, 16 GB DDR4 2133 MHz x 4pcs										
Environment	Temperature	+5 V										
	Temperature	3.3 V										
Physical Characteristics	Dimensions (W x H x D)	12 V										
	Dimensions (W x H x D)	1.31A										
Power	Input Mode	0.35A										
	Input Mode	4.52A										
Power	Power	5 Vsb										
	Power	0.06A										
Environment	Power	-12 V										
	Power	0A										
Physical Characteristics	Power	Normal										
	Power	-40 ~ 85° C (-40 ~ 185° F)										
Power	Power	0 ~ 60° C (14 ~ 158° F), depends on CPU speed and cooler solution										
	Power	482 x 177 x 479 mm (19" x 7" x 18.9")										
Power	Power	ATX input (Default)										
	Power											

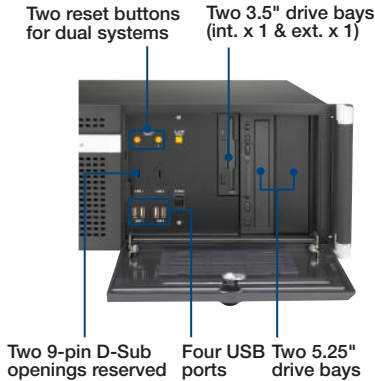
Block Diagram



Ordering Information

Part Number	Chipset	Memory	USB 3.0	USB 2.0	VGA	DP	HDMI 1.2	DVI-D	eDP	SATAIII	PCIe x16/ PCIex8	PCIe x4	PCIe x1	COM	TPM	GbE LAN	AMP
TECH-4010-585	Q170	Non-ECC	10	2	(1)	1	1	1	1	4	1/1	1	1	6	(1)	2	(1)
	C236	ECC/Non-ECC	10	2	(1)	1	1	1	1	4	1/1	1	1	6	(1)	2	(1)

Front View



Inside View



I/O View

