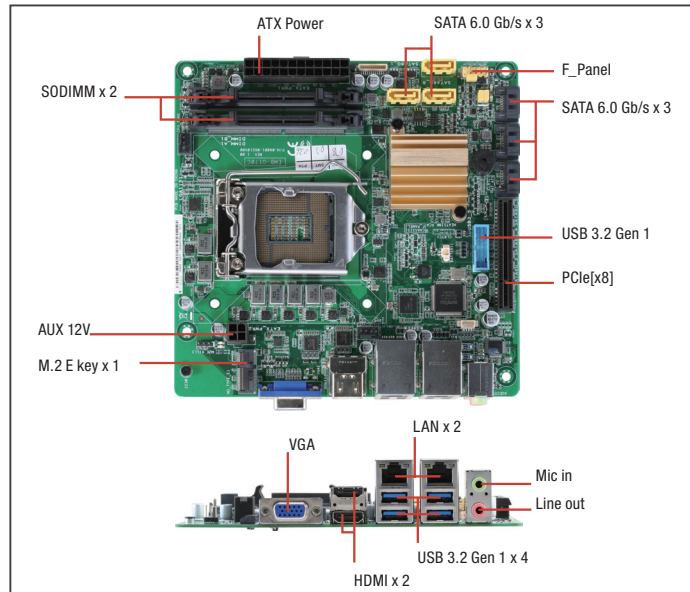


EMB-Q170C

6th/7th Generation Intel® Core™ i Series, LGA1151 Socket Processor, Max. 65W TDPs, M.2 x 1, SATA 6.0 Gb/s x 6



Specifications

System	
Processor	6th/7th Generation Intel® Core™ i7/ i5 /i3, LGA 1151 socket Processor, Max. 65W TDPs
Chipset	Intel® Q170
Memory	DDR4 2133/1867 MHz SODIMM x 2, Up to 32GB, Non-ECC, Un-buffered Memory, Dual channel memory architecture
I/O Chipset	NCT6791D
Ethernet	Intel® PCIe Gb LAN 219LM for vPro x 1, Intel® PCIe Gb LAN i211AT x 1
Audio	Realtek® ALC887 with Amp.
TPM	Infineon SLB9665 TT 2.0 (optional)
Expansion Slots	PCIe3.0 [x8] x 1 M.2 E-key (22 x 30 mm) for PCIe x 1
BIOS	128Mbit Flash ROM, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/Chassis, Voltage Monitor on Vcore/5V/12V, Fan Monitor on CPU/Chassis
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan/Chassis Fan
Wake On LAN / PXE	Yes (WOL/PXE)
Power State	S3, S4, S5
Graphics	
Graphics Chipset	Intel® HD Graphics
Graphics Multi Display	VGA + HDMI + HDMI
VGA	Up to 1920 x 1200 @ 60 Hz
DVI	—
HDMI	Up to 4096 x 2160 @24 Hz ; 3840 x 2160 @60 Hz, with Digital Audio
Display Port	—
LVDS	—
eDP	—
Backlight Control	—
Environment & Power & ME	
Battery	Lithium battery
Power Requirement	ATX
Operating Temperature	32°F ~140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0%~90% R/H, non-condensing
Certificate	CE & FCC
Form Factor	Mini-ITX 6.7" x 6.7" (170mm x 170mm)
Weight	1.1 lb (0.5 Kg)
MTBF (Hours)	282,880

Features

- 6th/7th Generation Intel® Core™ i Series, LGA 1151 Socket Processor, Max. 65W TDPs
- DDR4 SODIMM x 2, Up to 32 GB
- Three Independent Display : VGA x 1, HDMI x 2
- SATA 6.0Gb/s x 6, M.2 E-key 2230 for PCIe
- PCIe [x8] x 1
- ATX Power
- LAN1 Supports iAMT11.0



Back Panel I/O Ports

USB	USB 3.2 Gen 1 (5 Gbps) x 4
Display I/O	VGA x 1, HDMI x 2
Audio I/O	Mic-in x 1, Line out x 1
LAN I/O	LAN (RJ45) port x 2
Serial Port	—
PS/2 Port	—
Others	—

Internal I/O Connectors

Storage	SATA3 (6.0Gb/s) x 6, SATA power connector x 1
USB	USB 3.2 Gen 1 (2x10-PIN, 2.00mm) x 1 port supports additional 2 USB
Display I/O	—
Audio I/O	Speaker x 1
Serial Port	—
PS/2 Port	—
Parallel Port	—
DIO	—
FAN	4-pin CPU Fan connector x 1, 4-pin Chassis Fan connector x 1
Power	12V AUX Power Connector x 1, AT/ATX mode select jumper (optional) x 1
Others	M.2 E-key(22 x 30 mm) for PCIe x 1 Front Panel connector x 1 Chassis Intrusion x 1 Buzzer onboard x 1 CMOS jumper x 1
OS	
OS Support	Windows® 7 32/64-bit, Windows® 8.1 64-bit, Windows® 10 64-bit, Ubuntu16.04.02/Kernel4.8.0

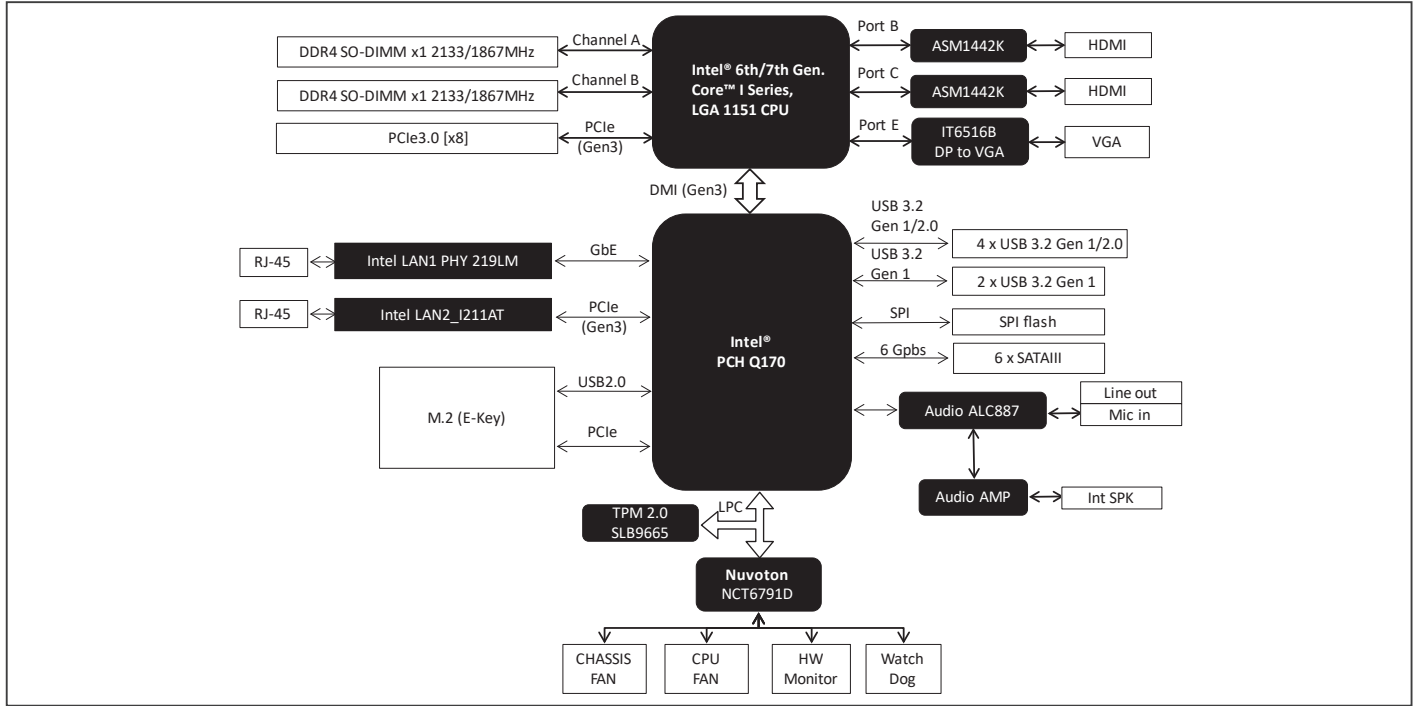
Packing List

- 14001-00630100
SATA 6G Cable (7P, 180; 90, 500mm 2 in1)
- I/O Shield
- EMB-Q170C

Optional Accessories

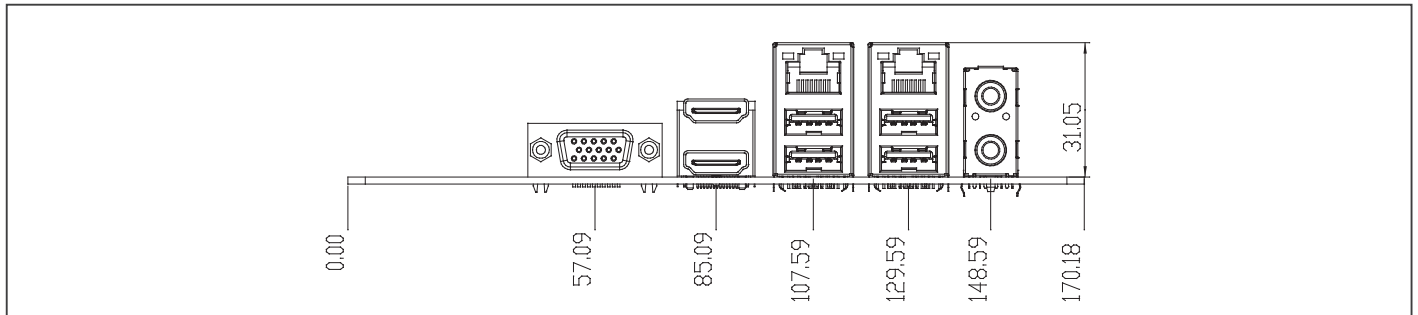
Part Number	Description
1759200172	CPU Cooler (2-Ball, Screw with Retention Plate)
175921156B	CPU Cooler (2-Ball, Push-pin Type)
COOLER-65W-01	CPU Cooler, 1U, 12V, 65W, 4P
1400100630100	SATA 6G Cable (7p, 180; 90, 500mm 2 in 1)
1700190450	(TF) USB 3.2 Gen 1 Cable 2 Ports USB 3.2 Gen 1 to 19P w/ bracket 450mm

Block Diagram



Dimension

Unit: mm



Order Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LVDS	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
EMB-Q170C-A10-K	Socket	SODIMM x 2	Fan	VGA x 1, HDMI x 2	SATA3 x 6	No	GbE x 2	USB 3.2 Gen 1 x 6	0	0	PCIe3.0 [x8] x 1 M.2, E-key (22x30mm) x 1	ATX	—	32°F ~ 140°F (0°C ~ 60°C)