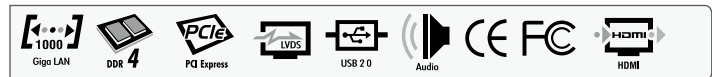


Mini-ITX, LGA1151 Socket For 6th Gen. Intel® Core™ i Series Processor, Up to 65W TDPs

## Launching in Q4

## Features

- LGA1151 Socket For 6th Gen. Intel® Core™ i Series Processor
- DDR4 SODIMM x 2, Up to 32GB
- Three independent Display: DP/HDMI Combo Connector x 2, eDP/LVDS x 1
- Intel LAN 219LM for vPro x 1, 211AT x 1
- M.2 slot(E-key) x 1@top side, (M-key) x 1@bottom side
- PCI-Express [x4] x 1
- Low Profile



## Specifications

System	
Form Factor	Mini-ITX
Processor	LGA1151 Socket For 6th Gen. Intel® Core™ i Series Processor, Max. 65W TDPs
Chipset	Intel® Q170 Express Chipset
System Memory	SODIMM x 2, max. 32GB, 260-pin DDR4 2133/1867 MHz, non-ECC, un-buffered memory
Graphics	Intel® HD Graphics
I/O Chipset	NCT6791D
Ethernet	Intel PCIe Gb LAN 219LM for vPro x 1, Intel PCIe Gb LAN 211AT x 1
Audio	Realtek® ALC887
TPM	Infineon SLB9635 TT 1.2 (default: no)
Expansion Interface	PCIe [x4] x 1, M.2 (M-key) x 1, (22x80mm) (SATA/PCIe [x4]), M.2 (E-key) x 1, (22x30mm) (PCIe/USB/I2C-ME/SDIO/UART/PCM), on Top side
BIOS	128Mbit Flash ROM, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/System 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
Power	
Battery	Lithium battery
Power Requirement	12VDC
Power Compliance	Compliant with EuP / ErP
Mechanical	
Dimension	Mini-ITX 6.7" x 6.7" (170mm x 170mm)
Gross Weight	1.1 lb (0.5 Kg)
Environmental	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	—
Operating Humidity	0% ~ 90% RH, non-condensing
Certificate	CE & FCC
MTBF	—
Display	
Chipset	Intel® HD Graphics
Multi Display	HDMI1+HDMI2+LVDS, HDMI+DP+LVDS, DP1+DP2+LVDS, HDMI1+HDMI2+eDP, HDMI+DP+eDP, DP1+DP2+eDP, HDMI1+HDMI2, DP1+DP2, HDMI+DP, HDMI+LVDS, HDMI+eDP, DP+LVDS, DP+eDP
eDP/LVDS	LVDS Up to 1920 x 1200 @ 60 Hz, Dual Channel 18/24-bit eDP UP to 4096 x 2340 @ 60Hz (could only use 1 function at a time since only support 1 x inverter)

HDMI/DP Combo	HDMI Up to 4096 x 2160 @ 24 Hz / 2560 x 1600 @ 60 Hz, with Digital Audio DP Up to 4096 x 2160 @ 24 Hz / 3840 x 2160 @ 60 Hz, with Digital Audio
I/O	
Storage	SATA 6.0Gb/s, M.2 (M-key) x 1, (22x80mm) (SATA/PCIe[x4]), M.2 (E-key) x 1, (22x30mm) (PCIe/USB/I2C-ME/SDIO/UART/PCM), on Top side
USB	USB 3.0 port x 4 (Rear IO) USB 2.0 port x 6 (internal pin header)
Display I/O	eDP x 1, LVDS x 1, HDMI / DP Combo x 2
Audio I/O	Mic-in, Line-out, AAFP, internal speaker x 1
LAN I/O	RJ-45 x 2
Serial Port	RS-232/422/485 x 1 supports optional 5V/12V/RI (mid board)
Parallel Port	—
PS/2 Port	—
DIO	8-bit Digital I/O x 1 (programmable)
FAN	CPU Fan connector x 1 (4-pin) Chassis Fan connector x 1 (4-pin)
Operating System	
MS Windows	Windows® 8.1 32 / 64-bit
Linux	Linux Fedora

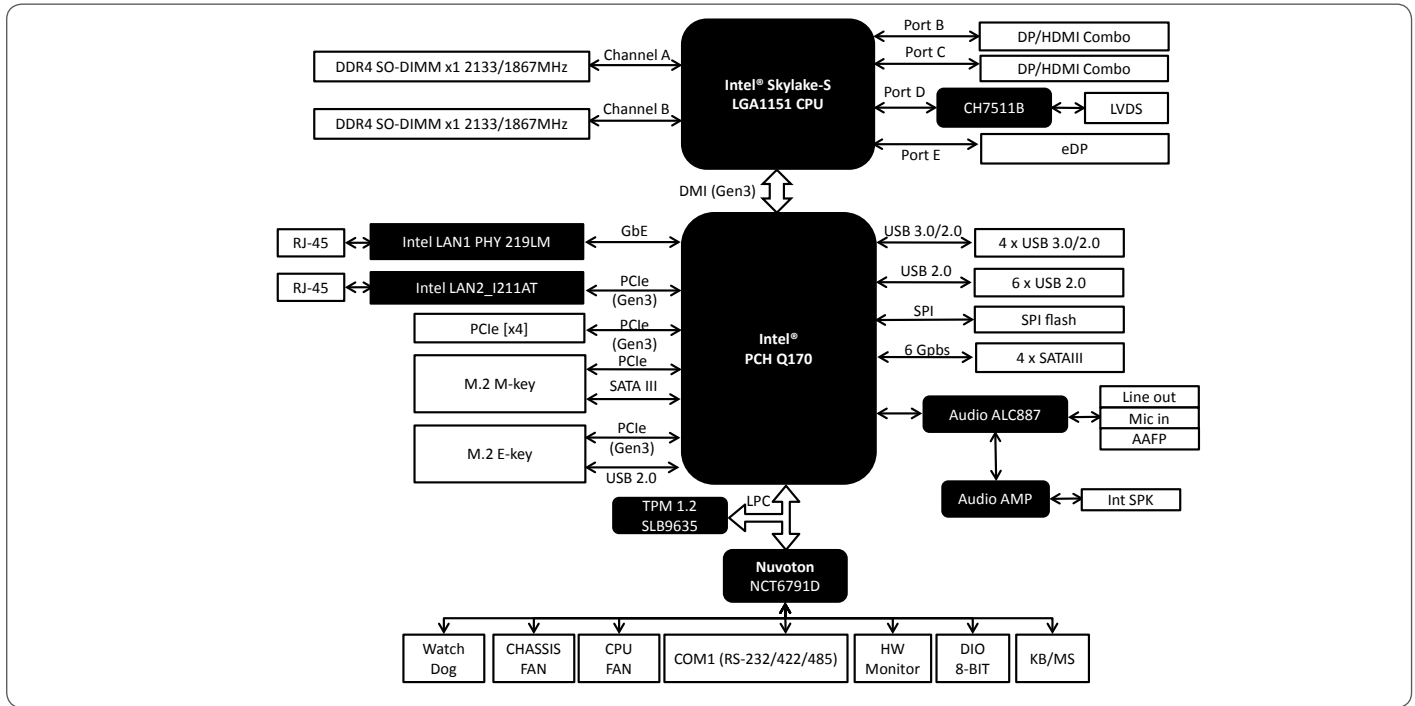
## Packing List

- SATA 6.0 Gb/s Cable
- I/O Shield
- Product DVD
- EMB-Q170B

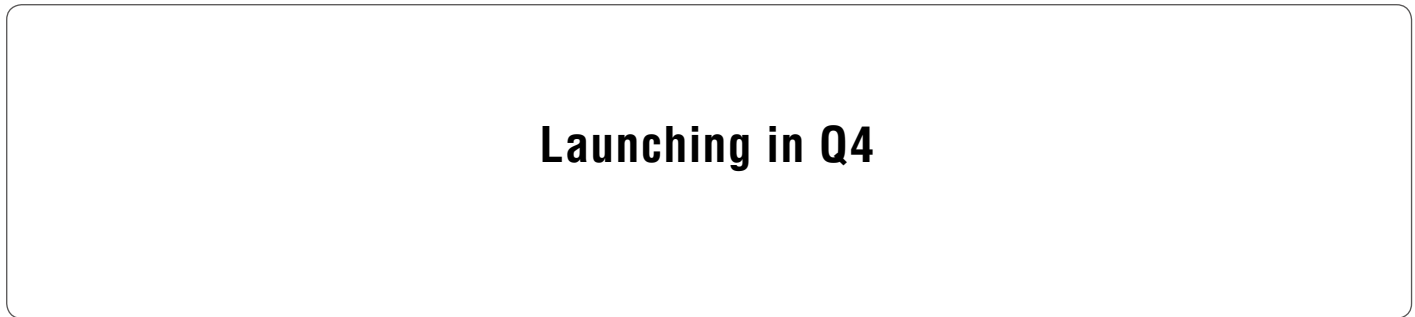
## Optional Accessories

- TBD

## Block Diagram



## Dimension Unit: mm



## Ordering Information

- TBD

## I/O Ports Placement

