

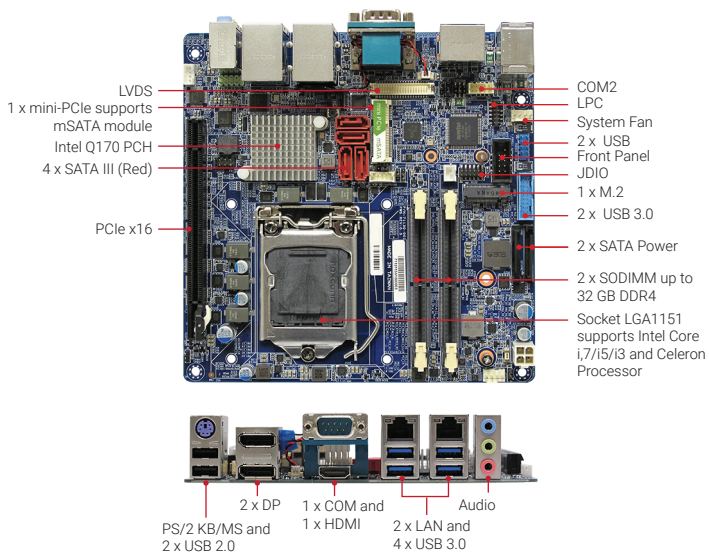
MX170QD

mini-ITX Motherboard

Intel Q170 mini-ITX motherboard supports 14nm Intel Kaby Lake/ Skylake Core Celeron Processors

Features

- High Reliability Gold Plating Connectors
- Intel LGA1151 socket supports 6th/7th generation 14nm Intel Kaby Lake¹ / Skylake Core i7/i5/i3 and Celeron processors
- 2 x (Gold Plated) SODIMM slots support up to 32 GBDual Channel DDR4 system memory
- Supports 3 Independent Displays
- 2 x DP (Gold Plated), 1 x HDMI (Gold Plated), 1 x LVDS
- 4 x SATA III (Gold Plated), 4 x USB 2.0 (Gold Plated), 6 x USB 3.0 (Gold Plated), 2 x COM Ports
- 1 x PCIe x16 (Gold Plated), 1 x mini-PCIe (Gold Plated) with SATA III support, 1 x M.2 (Gold Plated) (2280 or 2242)
- 1 x 4-pin DC-in (Gold Plated)



Specifications

System

CPU	Intel LGA1151 socket supports 6th/7th generation 14nm Intel Kaby Lake ¹ / Skylake Core i7/i5/i3 and Celeron processors
	¹ Kaby Lake processor support BIOS will be a running change estimated to be in stock starting late Q3/Q4 2017 implementing important new ME code updates. Qual-samples are available now on a limited quantity basis. OS Win 10 and above; support Win 7 with external video cards
Chipset	Intel Q170 PCH Express Chipset
System Memory	2 x (Gold Plated) SODIMM slots support up to 32 GB Dual Channel DDR4 2133 MHz vertical type memory sockets
BIOS	128Mb SPI BIOS
I/O Chip	Nuvoton NCT6106D
Expansion	1 x PCIe x16 Slot (Gold Plated) 1 x Full/Half Size mini-PCIe (mSATA III Support) (Gold Plated) 1 x M.2 Slot (Gold Plated) (Support 2280 and 2242)
TPM	Optional TPM 2.0
Watchdog Timer	Reset: 1sec. ~ 255min. and 1sec. or 1min./step
H/W Status Monitor	Monitoring CPU Temperature and Cooling Fan Status. Auto Throttling Control When CPU Overheats
Other Features	iAMT 11.0, TXT, Turbo2, , GPIO, LPT, Gold Plating Connectors & Expansion Slots

Rear I/O

KB/MS	1 x PS/2
Audio	Line-in, Line-out, Mic-in
USB	4 x USB 3.0 and 2 x USB 2.0 Connectors
COM (Serial Port)	1 x DB-9 RS-232/422/485 Connector (Gold Flashed)
Display	1 x HDMI Connector (Gold Plated) 2 x DisplayPort Connectors (Gold Plated) Optional eDP
LAN	2 x RJ-45

Onboard I/O

LVDS	1 x 18/24 bits Dual Channel LVDS
USB	1 x USB 2.0 Headers (2 Ports Total) (Gold Plated) 1 x USB 3.0 Header (2 Ports Total) (Gold Flashed)
COM	1 x RS-232 (with Voltage Selection) (Gold Flashed)
SATA	4 x SATA III and SATA Power Connectors (Gold Plated)

Onboard I/O

DC-in	1 x 4-pin DC-in (Gold Plated)
MIO	1 x 8-bit GPIO, 1 x LPC, 1 x SPI, 1 x Front Audio, 1 x Front Panel (Gold Plated), 1 x 4-pin CPU Fan, 1 x 4-pin Chassis Fan, 1 x Cable Type CMOS Battery, 1 x Backlight Locking (Gold Flashed), 1 x Chassis Intrusion Locking Type Header (Gold Flashed)

Display

Chipset	Intel Integrated HD Graphics, 1.7 GB Display Memory
Resolution	HDMI Max Resolution: 4096x2160@24Hz DP Max Resolution: 4096x2304@60Hz LVDS Max Resolution: 1920x1200@60Hz * Max resolution depends on how many displays are active One Panel Display: 4096 x 2304 @ 60 Hz Two Panel Displays Concurrently: 2880 x 1800 @ 60 Hz Three Panel Displays Concurrently: 2304 x 1440 @ 60 Hz

Multi-Display	Supports 3 Independent Displays
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Audio

HD Codec	Realtek ALC892/887 HD Audio
Amplifier	3W Per Channel
Audio Interface	Line-out, Line-in, Mic-in

Ethernet

LAN 1	Intel i219-LM LAN Controller Gigabit Ethernet
LAN 2	Intel i211-AT PCIe LAN Controller Gigabit Ethernet

Mechanical & Environment

Power Requirement	12V, 16 - 24V DC
Operating Temp.	0 ~ 60°C (32 ~ 140°F)
Storage Temp.	-20 ~ 80°C (-4° ~ 167°F)
Operating Humidity	5%~90% Relative Humidity, Non-condensing
Form Factor	Mini ITX
Dimensions	6.7" x 6.7" (170mm x 170mm)
Weight	0.88 lbs (0.4kg)

Ordering Info

MX170QD	Intel Q170 Mini ITX Motherboard with DC Power
Accessory Included	1 x I/O Shield, 1 x DC in power cable, 1 x SATA Power Cable

* All product specifications and images are subject to change without notice.
Last update: 6/9/2017