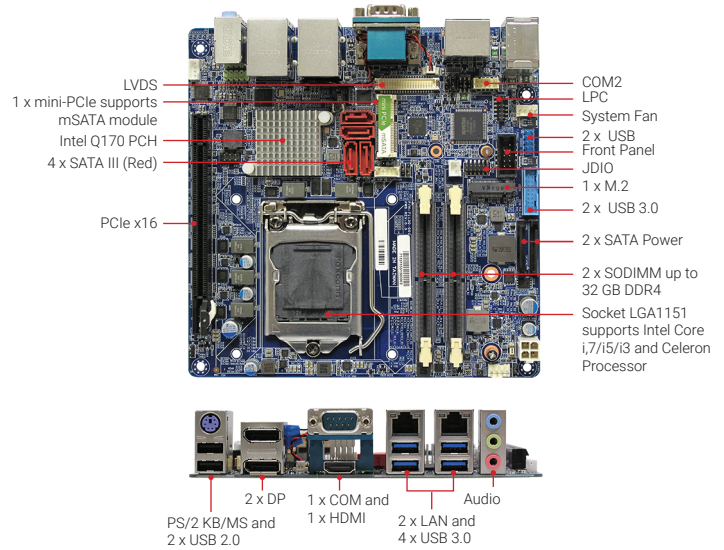


MX170QD

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 GB Dual 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)
- iAMT 11.0, Optional TPM 2.0



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 x 16 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 (Gold Plated), 2 x DisplayPort (Gold Plated), Optional eDP |
| LAN | 2 x RJ-45 |

Onboard I/O

| | |
|-------------------|--|
| LVDS | 1 x 18/24 bits Dual Channel LVDS |
| USB (Gold Plated) | 1 x USB 2.0 (2 Ports) and 1 x USB 3.0 (2 Ports) |
| 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

Audio

| | |
|-----------|-----------------------------|
| HD Codec | Realtek ALC892/887 HD Audio |
| Amplifier | 3W Per Channel |

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) |

* All product specifications and images are subject to change without notice. Last update: 06/09/2017



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