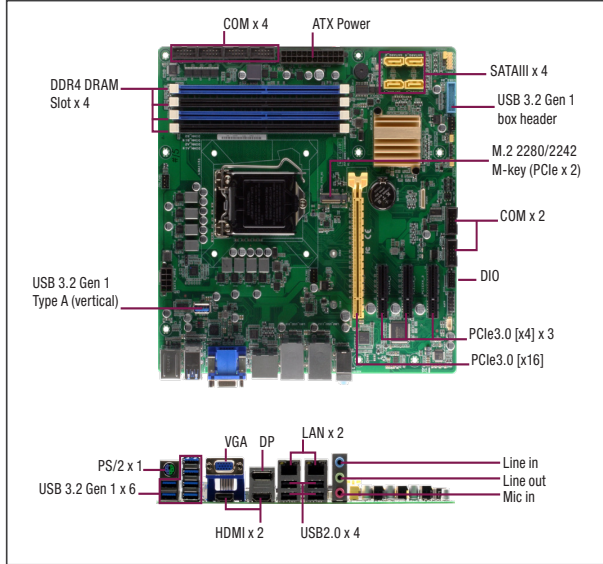


# MAX-Q370C

Micro-ATX Industrial Motherboard with 8th/9th Generation Intel® Core™ Processor, DDR4 DRAM, Multiple Display Ports, Supports iAMT 12.0

Industrial Motherboards



## Features

- 8th/9th Generation Intel® Core™ LGA1151 Processor
- Supports Max. TDP 6 Core 95W, Do Not Support 8 Core 65W/ 95W
- DDR4 2666/2400/2133 MHz, max. 128GB
- Three Independent Displays: HDMI x 2, VGA x 1, DP x 1
- Dual Intel® Gigabit Ethernet, LAN1 Supports iAMT 12.0
- USB 3.2 Gen 1 x 9, USB 2.0 x 4
- Internal USB 3.2 Gen 1 box header x 1, USB 3.2 Gen 1 Type A (vertical) x 1, M.2 2280/2242 M-key (PCIe x 2) x 1
- TPM Onboard



## Specifications

System	
Processor	Intel® 8th/9th Generation (Coffee Lake-S/Coffee Lake-S Refresh) Core™ i9 /i7/ i5 /i3, Pentium 14nm LGA 1151 socket Processor, Max. 6 Core 95W
Chipset	Intel® Q370 Express Chipset
Memory	DIMM x 4, DDR4 (2666/2400/2133 MHz, max. 128GB) non-ECC, un-buffered memory Dual channel memory architecture
I/O Chipset	NCT6793D+ F81216HD
Ethernet	Intel® PHY i219LM Giga LAN (supports Intel® AMT 12.0) x 1 Intel® i210AT Giga LAN x 1 RJ45 x 2
Audio	Realtek® ALC897 6-Channel High Definition Audio CODEC
TPM	Nuvoton NPCT750 TPM2.0 onboard
Expansion Slots	PCIe 3.0[x16] Slot x 1 PCIe 3.0[x4] Slot (open edge) x 3 M.2 2280/2242 M-key (PCIe SSD (Ideal speed: 800MB/S)) x 1
BIOS	256 Mbit Flash ROM x 1, AMI BIOS
H/W Monitor	Temperature Monitor on CPU/Chassis, Voltage Monitor on Vcore/5V/3.3V/12V, Fan Monitor on CPU/Chassis
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan/ Chassis Fan x 2
Wake On LAN/ PXE	Yes (WOL / PXE)
Power State	S3, S4, S5
Graphics	
Graphics Chipset	Intel® Graphics Media Accelerator
Graphics Multi Display	HDMI+VGA+DP, HDMI+HDMI+VGA, HDMI+HDMI+DP
VGA	Up to 1920 x 1200 @60Hz (via IT6516B)
DVI	—
HDMI	Up to 4096 x 2160 @ 24 Hz / 2560 x 1600 @ 60 Hz, with Digital Audio
Display Port	Up to 4096 x 2160 @ 24 Hz / 3840 x 2160 @ 60 Hz, with Digital Audio
LVDS	—
eDP	—
Backlight Control	—
Environment & Power & ME	
Battery	Lithium battery
Power Requirement	24-pin ATX connector x 1, 8-pin (2x4) ATX 12V Power connector x 1
Operation Temperature	32°F ~140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~185°F (-40°C ~85°C)
Operation Humidity	0%~90%RH, non-condensing
Certificate	CE & FCC Class A
Form Factor	Micro-ATX Form Factor, 9.6"x9.6" (244 mm x 244 mm)
Weight	1.76 lb (0.8 Kg)
MTBF (Hours)	264,820

### Rear Panel I/O Ports

USB	USB 3.2 Gen 1 ports (5 Gbps) x 6, USB 2.0 ports x 4
Display I/O	DP x 1, VGA x 1, HDMI x 2
Audio I/O	Audio Jack x 3: Line-in, Mic-in, Line-out
LAN I/O	LAN (RJ45) ports x 2
Serial Port	—
PS/2 Port	PS/2 combo Port (Keyboard & Mouse) x 1
Others	—

### Internal I/O Connectors

Storage	SATA III (6.0Gb/s) ports x 4, support RAID 0/1/5/10 M.2 2280/2242 M-key (PCIe SSD (Ideal speed: 800MB/S)) x 1
USB	USB 3.2 Gen 1 box header x 1, support additional 2 ports (2x5PIN, p=2.54mm), USB 3.2 Gen 1 Type A (vertical) connector x 1
Display I/O	—
Audio I/O	AAFP x 1
Serial Port	RS-232 headers x 5 RS-232/422/485 (COM1, supports 5V/12V/RI optional) x 1
PS/2 Port	—
Parallel Port	—
DIO	8-bit Digital I/O interface (In/Out programmable) x 1
FAN	CPU Fan connector(s) (4-pin) x 1, Chassis Fan connector(s) (4-pin) x 2
Power	—
Others	Chassis Intrusion x 1 AT/ATX mode select jumper x 1 Front panel header x 1 Clear CMOS jumper x 1 3-pin ME lock header x 1 Buzzer on-board x 1
OS	
OS Support	Windows® 10 64bit, Windows® 11 64bit, Linux Ubuntu 64bit (18.04.1/Kernel4.8.0)

## Packing List

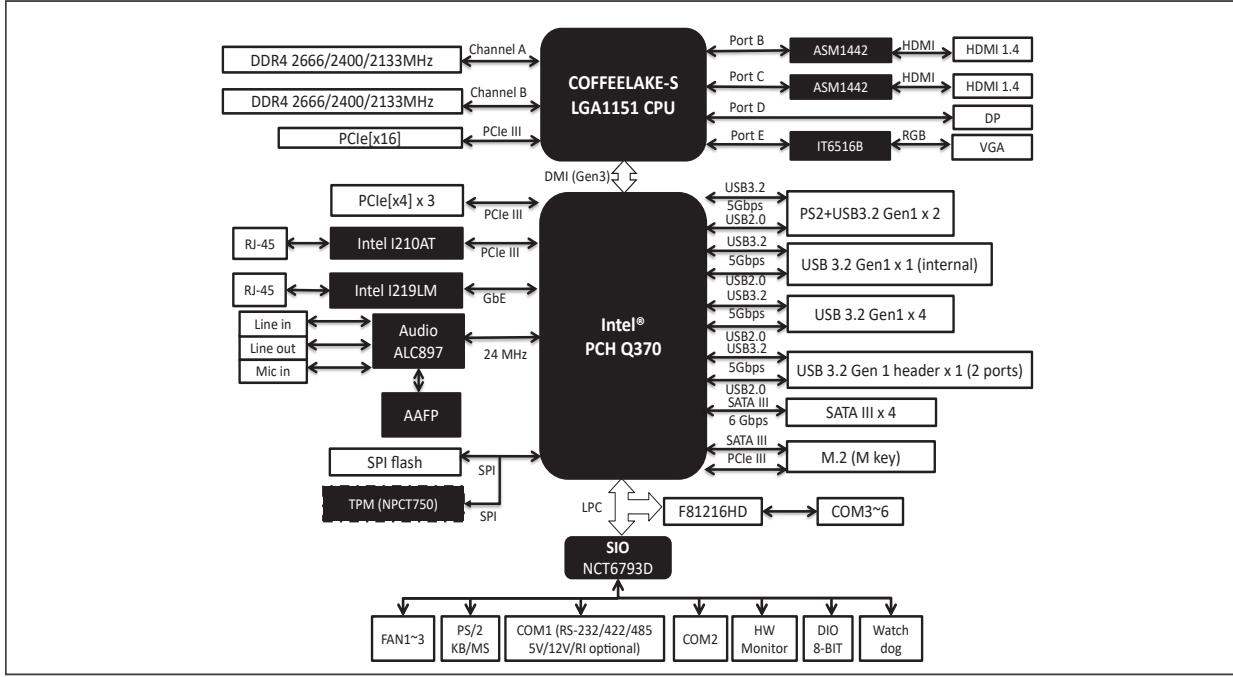
- 14001-00630100 SATA 6G Cable (7P, 180; 90, 500mm 2 in 1)
- 14001-00400100 COM Port Cable (9P, 260mm, p=2.54mm w/bracket)
- I/O Shield
- MAX-Q370C

# MAX-Q370C

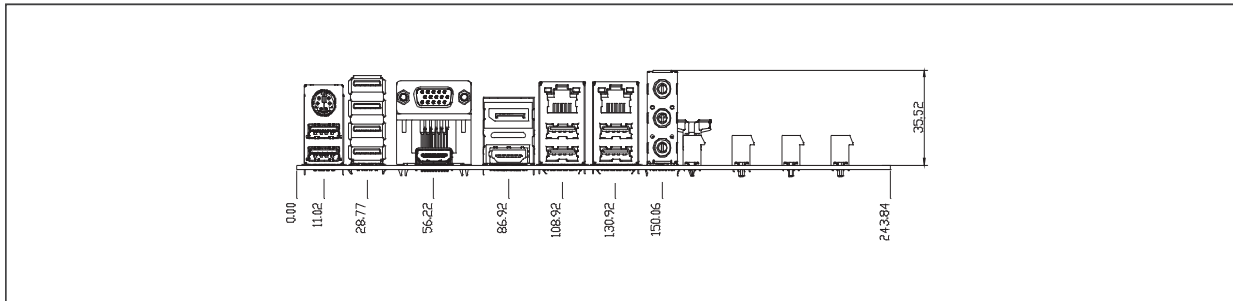
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Industrial Motherboards

## Block Diagram



## Dimension Unit: mm



## Ordering Information

Part number	CPU	RAM	Fan/Fanless	Display	LVDS	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
MAX-Q370C-A11-210	LGA 1151 socket	DDR4 2666/2400/2133	Fan	HDMI x 2, VGA x 1, DP x 1	—	SATA3 x 4, M.2 2280/2242 M-key x 1	Intel@GbE x 2	USB 3.2 Gen 1 x 6, USB 2.0 x 4, USB 3.2 Gen 1 box header x 1, USB 3.2 Gen 1 type A (vertical) x 1	5	1	PCIe[x16] x 1, PCIe[x4] (open edge) x 3, M.2 2280/2242 M-key x 1	ATX	Onboard	32°F ~140°F (0°C ~ 60°C)

## Optional Accessories

Part Number	Description
1700190450	USB 3.2 Gen 1 Cable (19P, 450mm, w/bracket)
AP-FNTH1Q370010	CPU Cooler (2-Ball Bearing, 2U, TDP Max. 100W)
1709100330	USB 2.0 cable (9P, 330MM, p=2.54mm, w/bracket)
170910020K	USB 2.0 cable (9P, 200MM, p=2.54mm, w/o bracket)
175921156B	CPU Cooler (2-Ball, Push-pin Type)
1759200172	CPU Cooler (2-Ball, Screw with Retention Plate)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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