



ATX Industrial Pc Motherboard LGA1151 Socket 32GB DDR4 Brand New Dual LAN

Our Product Introduction

Basic Information

- Place of Origin: Guangdong, China
- Brand Name: ASUS
- Certification: ROHS
- Model Number: Q170A-IM-A
- Minimum Order Quantity: 1
- Price: Negotiable
- Packaging Details: All the products are packed in right way to keep it safe. For small sizes of products we use tray+ carton, for bigger sizes we use foam slot+carton. We also design packages according to customers' requirements.
- Delivery Time: 7-10 workdays
- Payment Terms: T/T



Product Specification

- Item Condition: New
- Package: Yes
- Ports: Wifi, SATA, DVI, VGA, PCI-Express X16, USB 2.0, Display Port, M.2, USB 3.0, Usb3.1, PCI-E 3.0, PCI-Express X1, HDMI
- With CPU: No
- Memory Bank: 2 DDR4 DIMM
- CPU Type: Intel
- Chipset: Intel Q170 Chipset
- Maximum Ram Capacity: 32GB
- Memory Channel: Double
- Private Mold: NO
- Products Status: New
- Application: Server/Workstation
- Chipset Manufacturer: Intel
- Socket Type: LGA1151



More Images

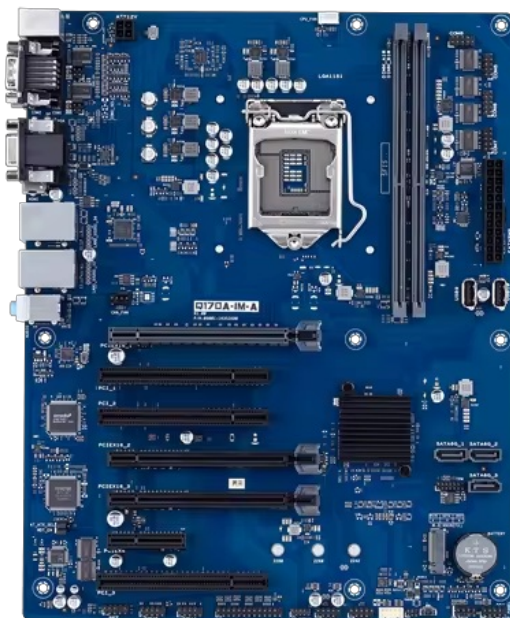


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Product Description

Q170A-IM-A ATX industrial motherboard , LGA1151 socket for the 6 th/7th Gen CPU DIMM up to 32GB DDR4 Brand New Dual LAN

Product Description



Main Infos

ASUS Q170A-IM-A is an ATX industrial motherboard with rich I/O capabilities and advanced connectivity. It offers dual display outputs, legacy options for industrial applications, GPIO ports and dual Intel LAN ports, plus rich expandability with 3*PCIe x16,

1*PCIe x4, 3*PCI and 8*COM. ASUS Q170A-IM-A is the ideal choice for a wide range of embedded applications. * Supports Intel®

7th/6th Gen Core™ processors (LGA1151) with the Intel Q170 chipset * Up to 8 COM ports, includes 2*RS-232/422/485 * Supports

3*PCIe x16, 1*PCIe x4 and 3*PCI expansion slots * Seven years of longevity with extended product life cycles

Q170A-IM-A

ATX, LGA1151 socket for the 6th/7th Gen CPU, Q170 chipset, 2*U-DIMM.
4*PCIe, 3*PCI, HDMI, VGA, Dual LAN, M.2 slot

Features

- Two 288-pin U-DIMM up to 32GB DDR4 2400/2133 MHz
- Supports Dual displays: VGA/HDMI
- 7-year longevity supply
- Wide Temperature Range: 0~60°C

Specifications



Processor System	CPU	Intel® Socket 1151 for 7th/6th Generation Core™ i7/i5/i3/Pentium®/Celeron® Processors supports Intel® 14 nm CPU, support max. 65W TDP
	CHIPSET	Intel® Q170 chipset
Memory	Technology	DDR4 2400/2133 MHz
	Max.	32GB
	Socket	2 x U-DIMM
Display	VGA	1, Supports up to 1920 x 1200 @60Hz
	HDMI	1, Supports up to 4096 x 2160 @ 24Hz
	Dual Display	VGA+HDMI(Default)
Expansion Slot	PCIe	1 x PCIe 3.0/2.0 x16 slot (x16 mode)
	PCIe	2 x PCIe 3.0/2.0 x16 slot (x4 mode)
	PCI	1 x PCIe 3.0/2.0 x4 slot
	M.2	3 x PCI
Ethernet	Speed	10/100/1000Mbps
	Controller	1 x Intel® I219LM, 1 x Intel® I211AT, supports WOL/PXE
	Connector	2 x RJ-45
	Audio	Realtek ALC897
Storage	SATA port	3 x SATA Gen 3.0, up to 6Gb/s
	VGA	1
Rear I/O	HDMI	1
	USB 3.2 Gen1	4
	Ethernet	2
	Serial Port	2(RS232/422/485)
	Audio jack	3
	PS/2	1 x Keyboard Port, 1 x Mouse Port
	Internal Connector	6 (RS232)
Internal Connector	USB2.0	2 x Header Support Additional 4 x USB2.0 Connectors
	USB2.0	2 x Stick Socket
	CPU Fan Connector	1 (PWM Mode)
	Chassis Fan Header	1 (PWM+DC Mode)
	Chassis Intrusion Header	1
	Front Panel Audio Connector (AAFP)	1
	System Panel Header	1
	Clear CMOS Jumper	1
	Speaker Connector	1
	LPC Debug Header	1
	I ² C Header	1
	Parallel	1
	GPIO Header	1 (8 Bit)
	AT/ATX Select Header	1
	Power Connector	1 x 4-pin ATX Power Connector, 1 x 24-pin ATX Power Connector

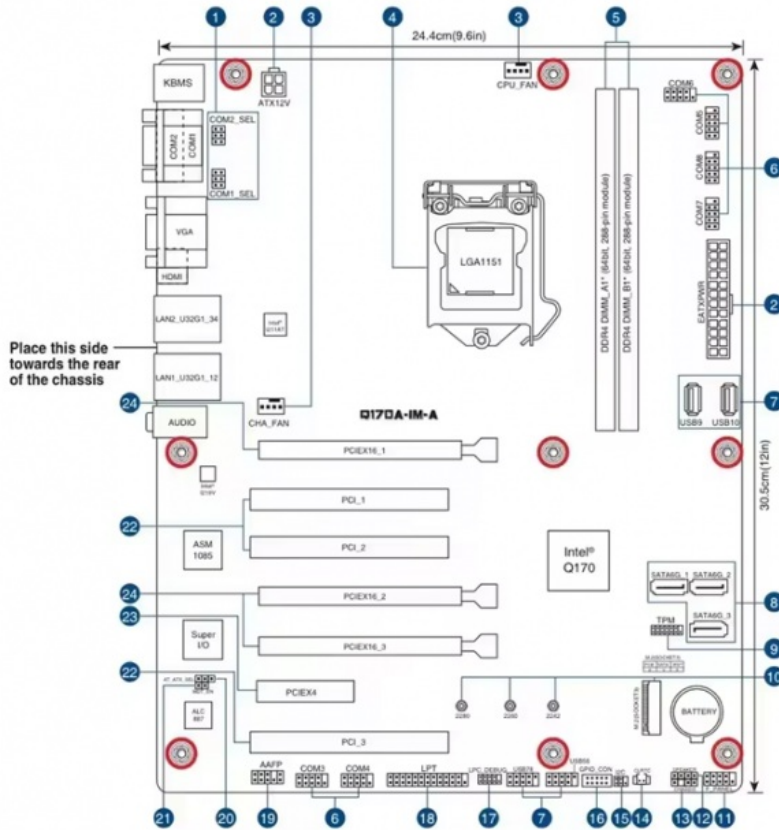
2.2 Motherboard layout



NOTE: Place nine screws into the holes indicated by circles to secure the motherboard to the chassis.



CAUTION! Do not overtighten the screws! Doing so can damage the motherboard.

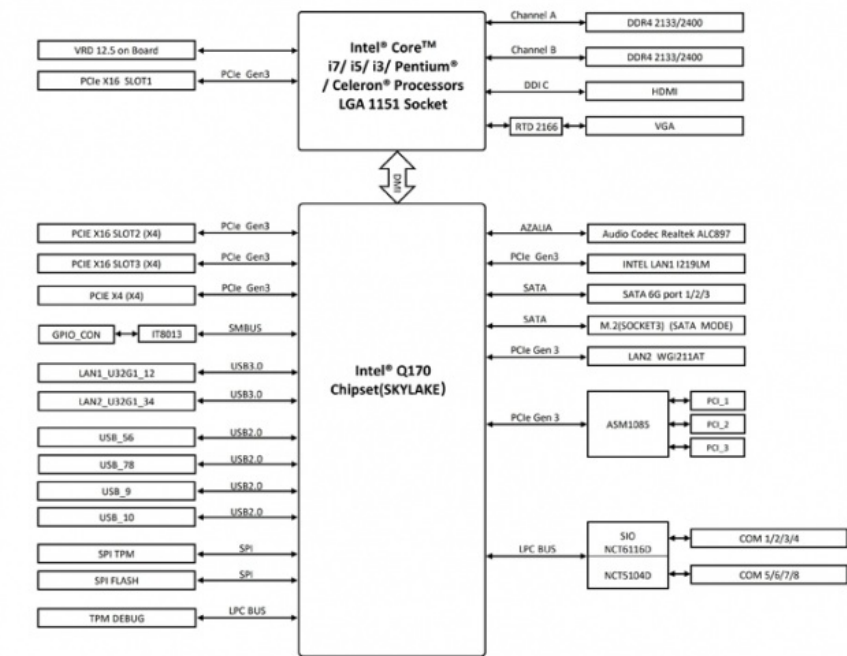


Connectors/Jumpers/Slots		Page
1.	COM1/2 Ring/+5V/+12V selection jumpers (6-pin COM1_SEL, COM2_SEL)	2-12
2.	ATX Power connectors (24-pin EATXPWR, 4-pin ATX12V)	2-16
3.	CPU and Chassis Fan headers (4-pin CPU_FAN, 4-pin CHA_FAN)	2-16
4.	Intel® LGA1151 CPU socket	2-4
5.	DDR4 U-DIMM slots	2-9
6.	COM Port headers (10-1 pin COM3 - COM8)	2-17
7.	USB 2.0 headers/connectors (10-1 pin USB56, USB78 / USB9, USB10)	2-17
8.	Serial ATA 6.0 Gb/s connectors (7-pin SATA6G_1/2/3)	2-18
9.	SPI TPM header (14-1 pin TPM)	2-18
10.	M.2 slot (SOCKET 3)	2-19
11.	System Panel header (10-1 pin F_PANEL)	2-20
12.	Speaker header (4-pin SPEAKER)	2-21
13.	Chassis Intrusion header (4-1 pin CHASSIS)	2-12
14.	Clear RTC RAM (2-pin CLRTC)	2-11
15.	I ² C header (6-1 pin I ² C)	2-21
16.	General purpose input/output header (10-pin GPIO_CON)	2-22
17.	LPC Debug header (10-1 pin LPC_DEBUG)	2-22
18.	LPT header (26-1 pin LPT)	2-23
19.	Front Panel Audio header (10-1 pin AAFP)	2-23
20.	AT/ATX mode selection jumper (3-pin AT_ATX_SEL)	2-13
21.	WDT Enable jumper (2-pin WDT_EN)	2-13

Specifications

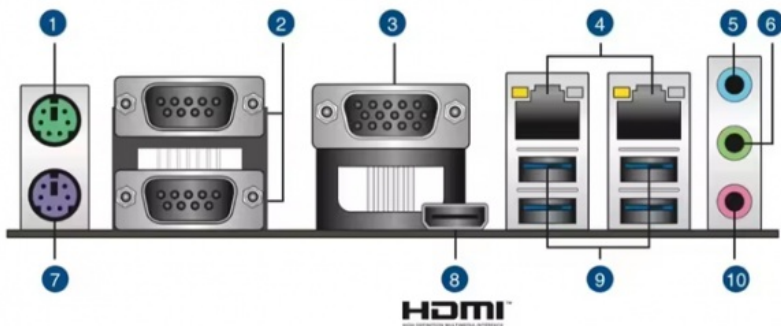
Watchdog Timer	H/W	YES
Security	TPM	1 x SPI TPM header
Power	Power Type	AT/ATX mode
Operating System	Microsoft Windows	Windows 7 (32/64bit) / Windows 10 (64bit) / Win10 IoT Enterprise
	Linux	Ubuntu, Red Hat Enterprise, Fedora Workstation, Open SUSE
Environment	Operating Temperature	0~60° C
	Non-Operating Temperature	-40~85° C
	Relative Humidity	Operational humidity: 40° C @ 95%
Dimension	Form Factor	ATX, 305 x 244 mm
Certification	EMI & Safety	CE, FCC

Block Diagram



2.6 Connectors

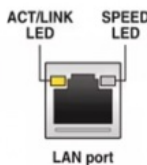
2.6.1 Rear panel connectors



1. **PS/2 mouse port (green).** This port is for a PS/2 mouse.
2. **Serial ports (COM, RS232/RS422/RS485).** These ports connect modems, or other devices that conform with serial specification.
3. **Video Graphics Adapter (VGA) port.** This 15-pin port is for a VGA monitor or other VGA-compatible devices.
4. **LAN (RJ-45) ports.** These ports allow Gigabit connection to a Local Area Network (LAN) through a network hub.

LAN port LED indications

Activity/Link LED		Speed LED	
Status	Description	Status	Description
Off	No link	OFF	10Mbps connection
Orange	Linked	ORANGE	100Mbps connection
Orange (Blinking)	Data activity	GREEN	1Gbps connection
Orange (Blinking then steady)	Ready to wake up from S5 mode		



5. **Line In port (light blue).** This port connects to the tape, CD, DVD player, or other audio sources.
6. **Line Out port (lime).** This port connects to a headphone or a speaker. In the 4.1, and 5.1 channel configurations, the function of this port becomes Front Speaker Out.
7. **PS/2 keyboard port (purple).** This port is for a PS/2 keyboard.
8. **HDMI™ port.** This port is for a High-Definition Multimedia Interface (HDMI™) connector, and is HDCP compliant allowing playback of HD DVD, Blu-ray, and other protected content.

9. **USB 3.2 Gen 1 (up to 5Gbps) ports.** These 9-pin Universal Serial Bus (USB) ports are for USB 3.2 Gen 1 devices.
10. **Microphone port (pink).** This port connects to a microphone.



Refer to the audio configuration table for the function of the audio ports in 2, 4, 5.1, or 7.1-channel configuration.

Audio 2, 4, 5.1 or 7.1-channel configuration

Port	Headset 2-channel	4-channel	5.1-channel	7.1-channel
Light Blue (Rear panel)	Line In	Rear Speaker Out	Rear Speaker Out	Rear Speaker Out
Lime (Rear panel)	Line Out	Front Speaker Out	Front Speaker Out	Front Speaker Out
Pink (Rear panel)	Mic In	Mic In	Bass/Center	Bass/Center
Lime (Front panel)	-	-	-	Side Speaker Out



To configure a 7.1-channel audio output:

Use a chassis with HD audio module in the front panel to support a 7.1-channel audio output.

INDUSTRIAL MOTHERBOARD DATASHEET Q170A-IM-A



Order Information

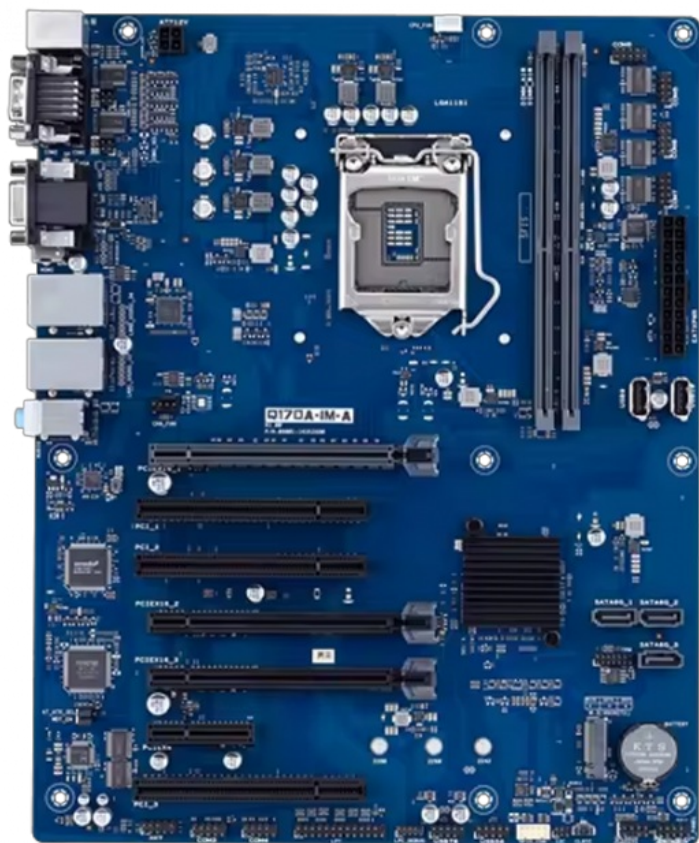
Model name	Part number	Description
Q170A-IM-A	90ME02X0*	Q170A-IM-A//LGA1151,Q170,PCI,COM,MB

* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

Packing List

Part number	Description	Quantity
13020*	IO shield	1
14013*	SATA 6G CABLE	1
13020*	M.2 screw pack	1

* The part number might vary due to part number revision.





Packing & Delivery



Company Profile

ZhuoHong Electronic Technology has been specializing in TFT LCD display and Board more than 10years. There are 90% of our business is custom made display modules for projects such as industrial devices, medical and smart home applications. Our mission is to provide customer one-stop solution. With LCD display and touch screen as our product center, great trust is built with our customers.





FACTORY SHOW



COG Automatic Plant



Bonding IC



Rubberizing



Sample production



Assembling



QC testing

APPLICATION



FAQ

A Q: When can i get the quotation?

A: We usually quote within 12 hours after we got your inquiry.

If it is very urgent, please call us or contact us via email, Skype or WhatsApp.

Q: What is your warranty?

A: We provide one year warranty.

Q: May i buy samples from you?

A: Yes! You are welcome to place sample order to test our superior quality and service.

Q: How to place bulk order?

A: 1) Tell us model number, quantity, color and other special requirements.

2) Proforma Invoice will be made and sent to you for approval

3) Production will be arranged once get your payment or deposit.

4) Goods will be delivered as stated on the Proforma Invoice.

Q: How will you deliver my goods to me?

A: We provide as many shipping options as possible, such as DHL, UPS, FEDEX, TNT AND EMS to enable our customers get their goods

rapidly at door. We also ship by economical method such as air cargo and sea cargo, direct line, air mail according to customers' request.

Q: What about the quality of your product?

A: We provide unrivaled quality: very rigorous testing process for incoming quality control, input process quality control, and final quantity control for every piece. We follow QC test procedure, and do 100% FQC to ensure your satisfaction.

Q: Can you provide OEM service?

A: Yes! We can provide professional OEM service.

Q: What payment method do you accept?

A: T/T(bank transfer), L/C and paypal

Q: Do you have any after-sales service?

A: Yes! Our product has professional after-sales service dept. Follow up R.M.A. Items service and upload product firmware and app for you download. If you have any technical questions with the goods, please feel free to contact our technical support dept, or our sales directly.



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