Q370I-IM-A R2.0

Industrial Motherboard

E18753
Revised Edition v4
July 2021

Contents

Chapter 1
Product overview

1.1 Package contents

Check your industrial motherboard package for the following items.

- ☑ 1 x ASUS Q370I-IM-A R2.0 Motherboard
- ☑ 1 x Serial ATA 6.0 Gb/s cables
- ☑ 2 x M.2 screw packages
- ☑ 1 x ASUS I/O Shield

NOTE: If any of the above items is damaged or missing, contact your distributor or sales representative immediately.

1.2 Features

- Intel® socket 1151 for 9th/8th Gen Intel® Core™ i7/ i5/ i3, Pentium®, and Celeron® processors
- Two Dual Channel DDR4 2666/2400/2133MHz Non-ECC SO-DIMMs up to 32GB
- 4 x SATA 6.0 Gb/s, 7 x USB 3.2 Gen 1, 6 x USB 2.0, 4 x COM headers
- 1 x PCIe x16 slot, 1 x M.2 (Key E, 2230) for Wi-Fi/BT devices, 1 x M.2 (Key M, 2242/2260/2280) with PCIe and SATA modes for SSD
- Multi-display: 2 x DP, 1 x DVI-D, LVDS or eDP

1.3 Specifications

CPU	Intel® socket 1151 for 9th / 8th Gen Intel® Core™ i7/ i5/ i3, Pentium®, and Celeron® processors Supports Intel® 14nm CPU Supports up to 65W TDP
Chipset	Intel® Q370 Chipset
Memory	2 x SO-DIMM, max.32GB, DDR4 2666/2400/2133 MHz SDRAM
Graphics	Integrated graphics processor - Intel® HD Graphics support Multi-VGA output support: DP/DVI-D/LVDS ports - Supports DVI-D output with a maximum resolution of 1920 x 1200 @ 60Hz - Supports 2x DisplayPort 1.2a outputs with a maximum resolution of 4096 x 2160 @ 60 Hz - Supports LVDS output with a maximum resolution of 1920 x 1200 @ 60Hz - Supports 2 lanes Embedded Display Port output with a maximum resolution of 1920 x 1200 @ 60Hz (co-lay with LVDS)
Expansion slots	1 x PCI Express 3.0/2.0 x16 slot 1 x M.2 socket 1 (Key E, 2230) for WiFi/BT device supports PCIE and CNVI WiFi module 1 x M.2 socket 3 (Key M, 2242/2260/2280) with PCIe and SATA modes
Storage	4 x SATA Gen3.0 up to 6.0 Gb/s ports
LAN	Dual Intel® Lan: 1 x Intel® I219LM, 1 x Intel® I211AT
Audio	Realtek ALC887/897-VD2 High Definition Audio CODEC* *** The audio codec may vary between motherboards, please consult your sales window for the motherboard's exact codec type.**
Rear panel I/O ports	1 x DVI-D port 2 x DisplayPorts 4 x USB 3.2 Gen 1 ports 4 x USB 2.0 ports 2 x LAN (RJ45) ports 1 x P/S2 keyboard port 1 x P/S2 mouse port 1 x COM port (RS232/422/485) 2 x Audio jacks
Front panel I/O ports	3 x COM Port headers (3 x RS232) 1 x USB 3.2 Gen 1 connector supports additional 2 USB 3.2 Gen 1 ports 1 x USB 3.2 Gen 1 stick socket 1 x USB 2.0 connector supports additional 2 USB 2.0 ports

(continued on the next page)

Front panel I/O ports	1 x CPU Fan connector 1 x Chassis Fan connector supports DC/PWM mode 1 x Chassis intrusion header 1 x Front panel audio connector (AAFP) 1 x System panel connector 1 x Clear CMOS header 1 x Speaker connector 1 x LPC Debug header 1 x S/PDIF connector 1 x I²C header 1 x AT/ATX mode selection header 1 x 24-pin ATX power connector 1 x 4-pin ATX power connector 1 x SPI TPM header 1 x M.2 socket 1 (Key E, 2230) for WiFi/BT device supports PCIE and CNVI WiFi module 1 x M.2 socket 3 (Key M, 2242/2260/2280) with PCIe and SATA modes 4 x SATA 6.0Gb/s connectors 1 x WDT Enable header 1 x eDP port 1 x LVDS header 1 x Flat panel display brightness connector 1 x Display panel VCC power selection header 1 x Display panel backlight power selection header 1 x Back Light power enable selection header
GPIO	1 x 8-bit GPIO header
Manageability	WfM 2.0, DMI 2.0, WOL by PME
Watch dog timer	Yes
Power requirement	AT/ATX mode DC in 12V
Operation Temperature	0~60°C
Non-Operation Temperature	-40~85°C
Relative Humidity	0%~85%
OS support	Windows® 10 (64-bit) Windows® 10 IoE Enterprise

(continued on the next page)

OS support	Ubuntu RedHat Enterprise Fedora Workstation OpenSUSE
Certification	CE, FCC
Form Factor	Mini-ITX Form Factor, 6.7”x 6.7” (17.0cm x 17.0cm)

NOTE: Specifications are subject to change without notice. Please refer to the ASUS website for the latest specifications.

Chapter 2
Motherboard information

2.1 Before you proceed

Take note of the following precautions before you install motherboard components or change any motherboard settings.

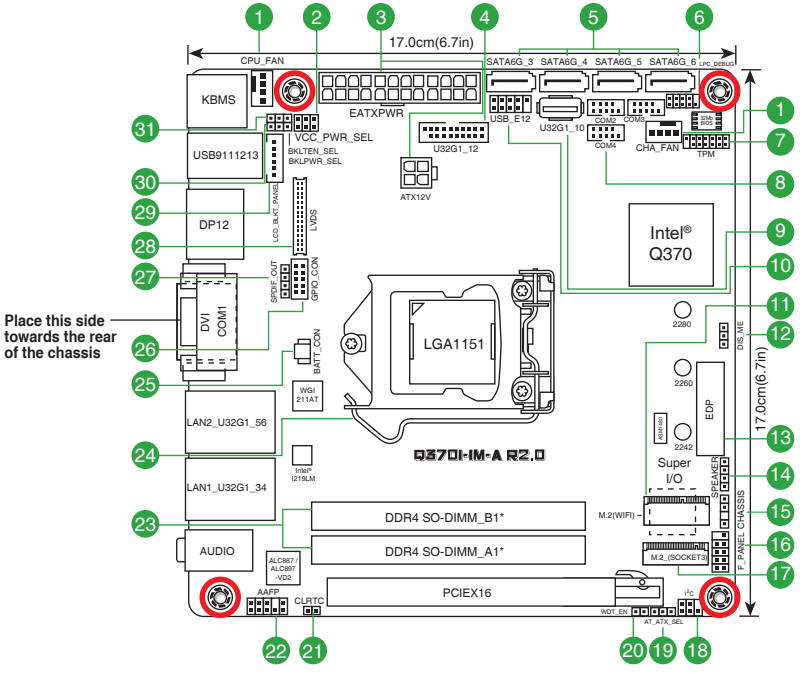
CAUTION!

- Unplug the power cord from the wall socket before touching any component.
- Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
- Hold components by the edges to avoid touching the ICs on them.
- Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.
- Before you install or remove any component, always remove the AC power by unplugging the power cord from the power outlet. Failure to do so may cause severe damage to the motherboard, peripherals, or components.

2.2 Motherboard layout

NOTE: Place four 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.



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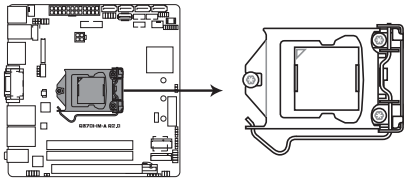
2.3 Central Processing Unit (CPU)

The motherboard comes with a surface mount LGA1151 socket designed for the Intel® 9th/8th Generation Core™ i7 / Core™ i5 / Core™ i3, Pentium®, and Celeron® processors.

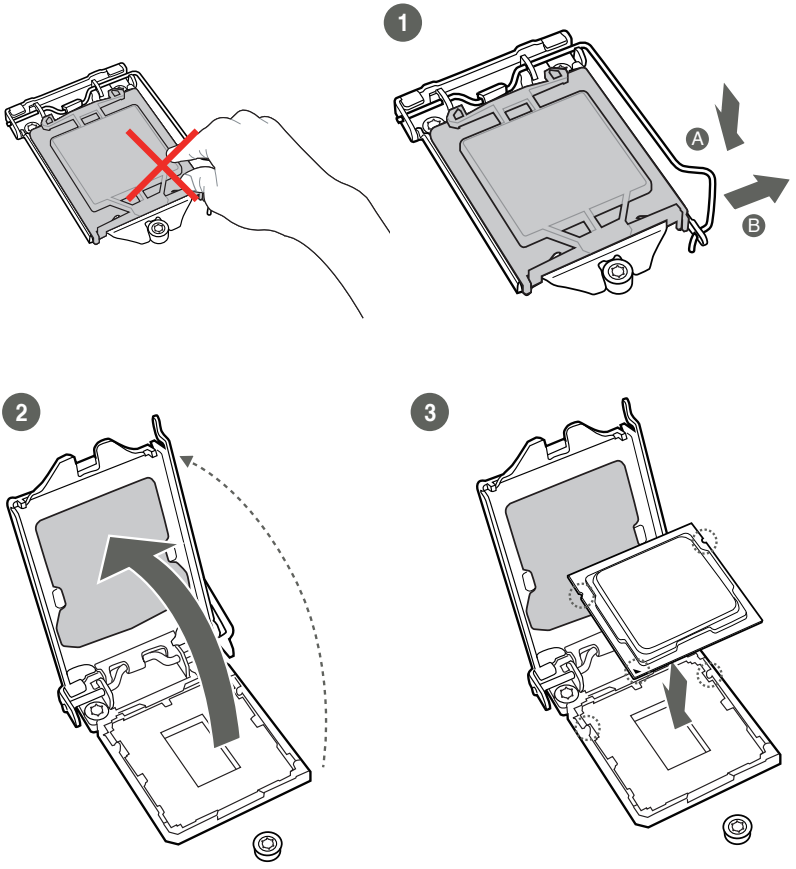


IMPORTANT! Unplug all power cables before installing the CPU.

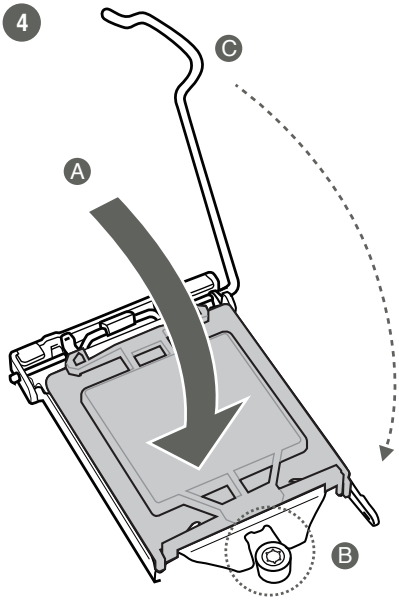
CAUTION!

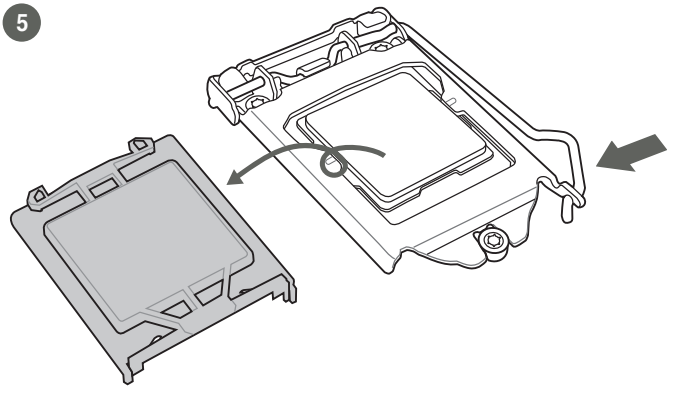
- Upon purchase of the motherboard, ensure that the PnP cap is on the socket and the socket contacts are not bent. Contact your retailer immediately if the PnP cap is missing, or if you see any damage to the PnP cap/socket contacts/motherboard components. The manufacturer will shoulder the cost of repair only if the damage is shipment/transit-related.
- Keep the cap after installing the motherboard. The manufacturer will process Return Merchandise Authorization (RMA) requests only if the motherboard comes with the cap on the LGA1151 socket.
- The product warranty does not cover damage to the socket contacts resulting from incorrect CPU installation/removal, or misplacement/loss/ incorrect removal of the PnP cap.

2.3.1 CPU installation

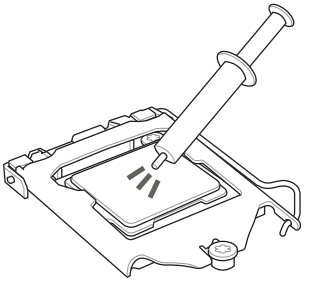


CAUTION! LGA1156 CPU is not compatible with the LGA1151 socket. DO NOT install an LGA1156 CPU on the LGA1151 socket.


4
C
A
B

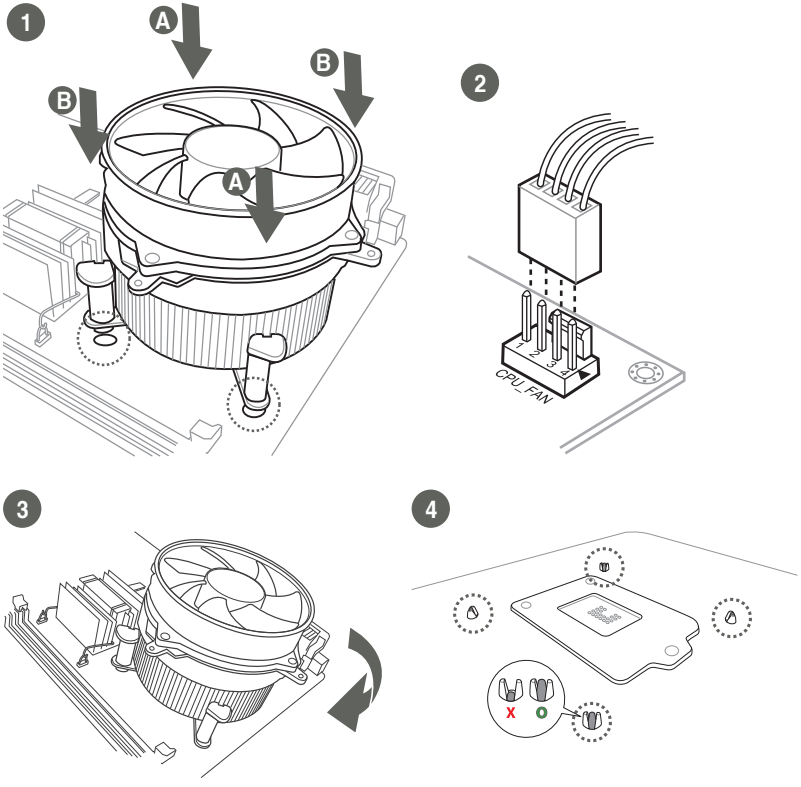

5

2.3.2 CPU heatsink and fan assembly installation



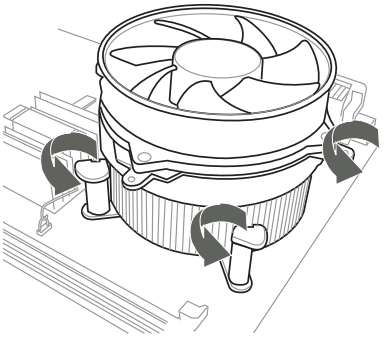
CAUTION! Apply the Thermal Interface Material to the CPU heatsink and CPU before you install the heatsink and fan if necessary.

To install the CPU heatsink and fan assembly

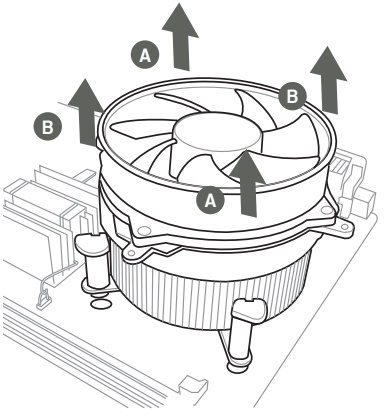


To uninstall the CPU heatsink and fan assembly

1

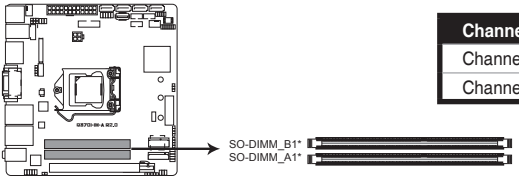


2



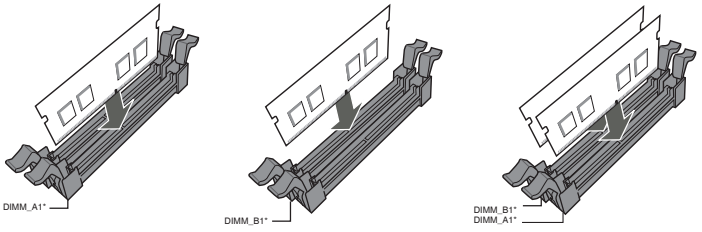
2.4 System memory

This motherboard comes with two Double Data Rate 4 (DDR4) Small Outline Dual Inline Memory Module (SO-DIMM) sockets. The figure below illustrates the location of the DDR4 SO-DIMM sockets:

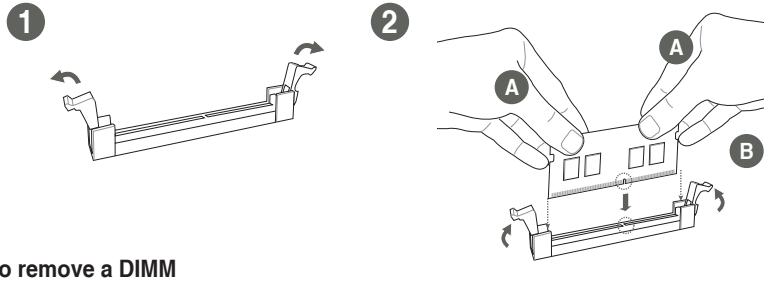


Channel	Sockets
Channel A	SO-DIMM_A1*
Channel B	SO-DIMM_B1*

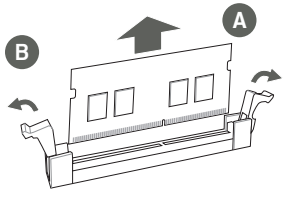
Recommended memory configuration



Installing a DIMM



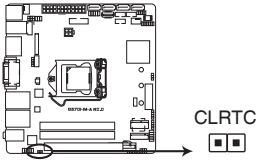
To remove a DIMM



2.5 Jumpers

1. Clear RTC RAM (2-pin CLRTC)

This header allows you to clear the CMOS RTC RAM data of the system setup information such as date, time, and system passwords.



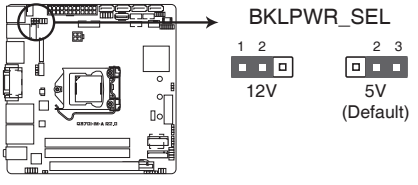
Connector type	HEADER 1x2p, 2.54mm pitch, S/T

To erase the RTC RAM:

1. Turn OFF the computer and unplug the power cord.
2. Use a metal object such as a screwdriver to short the two pins.
3. Plug the power cord and turn ON the computer.
4. Hold down the **<Del>** key during the boot process and enter BIOS setup to re-enter data.

NOTE: If the steps above do not help, remove the onboard battery and move the jumper again to clear the CMOS RTC RAM data. After clearing the CMOS, reinstall the battery.

2. Display panel backlight power selection (3-pin BLKT_PWR_SEL)

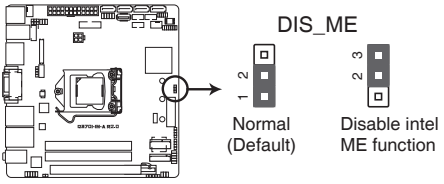


	Pins
12V	1-2
5V (Default)	2-3

Connector type	HEADER 1x3p, 2.54mm pitch, S/T

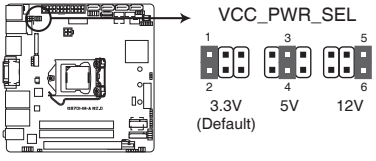
3. Intel® ME jumper (3-pin DIS_ME)

This jumper allows you to enable or disable the Intel® ME function. Set this jumper to pins 1-2 to enable (default) the Intel® ME function and to pins 2-3 to disable it.



Connector type	HEADER 1x3p, 2.54mm pitch, S/T

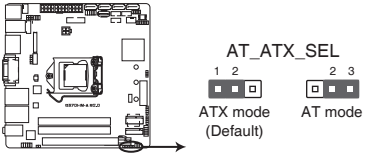
4. Display panel VCC power selection (6-pin VCC_PWR_SEL)



Setting	Pins
3.3V (Default)	1-2
5V	3-4
12V	5-6

Connector type	HEADER 2 x 3p, 2.54mm pitch, S/T

5. AT/ATX mode selection (3-pin AT_ATX_SEL)

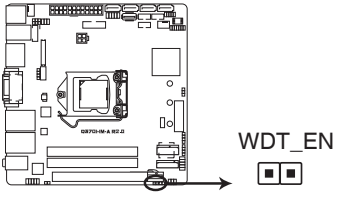


Pins	
1-2 (Default)	ATX mode
2-3	AT mode

Connector type	HEADER 1x3p, 2.54mm pitch, S/T

6. WDT Enable jumper (2-pin WDT_EN)

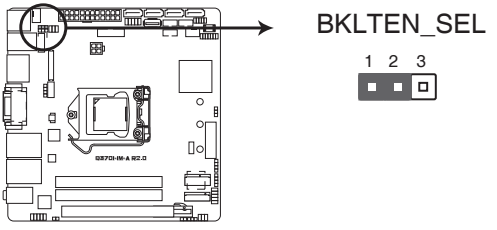
A watchdog timer is an electronic timer that is used to detect and recover from computer malfunctions. The HW WDT (watchdog timer) Enable jumper allows the HW watchdog resets the system automatically even when the system crashes.



Connector type	HEADER 1x2p, 2.54mm pitch, S/T

NOTE: By default, this jumper is set to HW WDT enabled with a jumper cap attached.

7. Back Light power enable mode (BKLTEN_SEL)

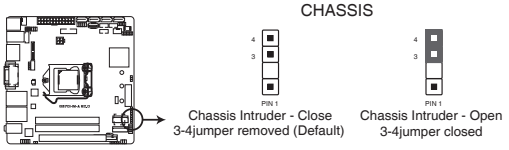


Pins	
1-2 (Default)	High Active
2-3	Low Active

Connector type	HEADER 1x3p, 2.54mm pitch, S/T

8. Chassis intrusion header (4-1 pin_CHASSIS)

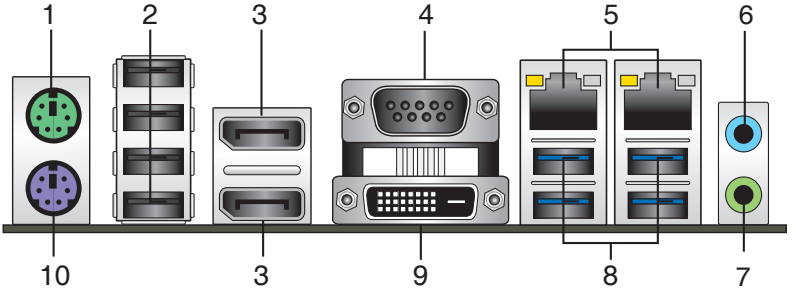
This header is for a chassis-mounted intrusion detection sensor or switch. Connect one end of the chassis intrusion sensor or switch cable to this connector. The chassis intrusion sensor or switch sends a low-level signal to this connector when a chassis component is installed. The signal is then generated as a chassis intrusion event.



Connector type	HEADER 4p, K2, 2.54mm pitch

2.6 Connectors

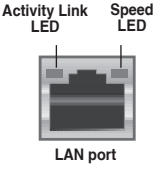
2.6.1 Rear panel connectors



1. **PS/2 mouse port (green).** This port is for a PS/2 mouse.
2. **USB 2.0 ports.** These 4-pin Universal Serial Bus (USB) ports are for USB 2.0/1.1 devices.
3. **DisplayPorts.** These ports are for DisplayPort-compatible devices.
4. **Serial port (COM).** This port connects a modem, or other devices that conform with serial specification.
5. **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		



6. **Line In port (light blue).** This port connects to the tape, CD, DVD player, or other audio sources.
7. **Line Out port (lime).** This port connects to a headphone or a speaker. In the 4 and 5.1 channel configurations, the function of this port becomes Front Speaker Out.

8. **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.

- USB 3.2 Gen 1 devices can only be used for data storage.
- We strongly recommend that you connect USB 3.2 Gen 1 devices to USB 3.2 Gen 1 ports for faster and better performance from your USB 3.2 Gen 1 devices.
- Due to the design of the Intel® 300 series chipset, all USB devices connected to the USB 2.0 and USB 3.2 Gen 1 ports are controlled by the xHCI controller. Some legacy USB devices must update their firmware for better compatibility.

9. **DVI-D port.** This port is for any DVI-D compatible device.

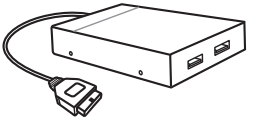
DVI-D can not be converted to output from RGB Signal to CRT and is not compatible with DVI-I.

10. **PS/2 keyboard port (purple).** This port is for a PS/2 keyboard.

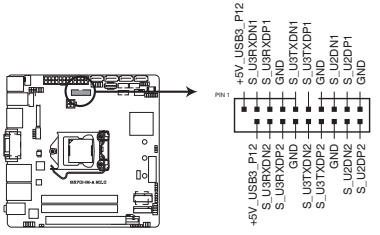
2.6.2 Internal connectors

1. USB 3.2 Gen 1 connector (20-1 pin U32G1_12)

Connect a USB 3.2 Gen 1 module to this connector for additional USB 3.2 Gen 1 front or rear panel ports. This connector complies with USB 3.2 Gen 1 specifications and provides faster data transfer speeds of up to 5 Gbps, faster charging time for USB-chargeable devices, optimized power efficiency, and backward compatibility with USB 2.0.



U32G1_12

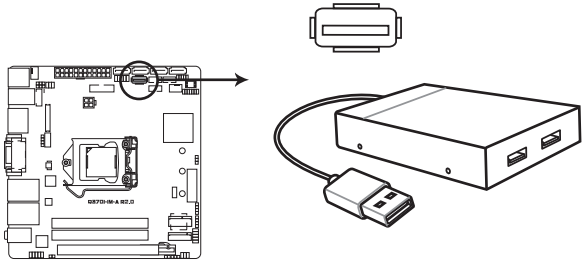


Connector type	BOX HD 2x10p, K20, 2.0mm pitch

2. USB3.2 Gen 1 port (U32G1_10)

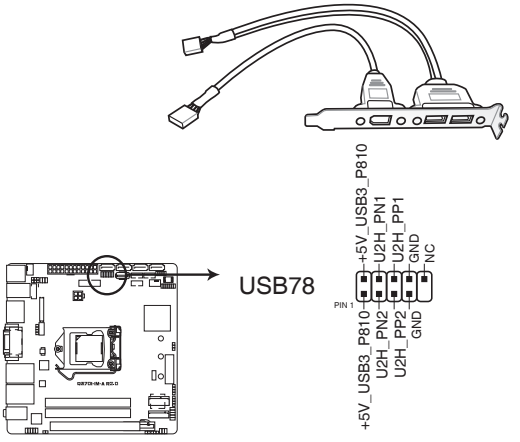
This Universal Serial Bus (USB) port is for USB 3.2 Gen 1 devices.

U32G1_10



3. USB 2.0 connector (10-pin USB78)

This connector is for an USB 2.0 port. Connect the USB cable to this connector. This USB connector complies with USB 2.0 specification that supports up to 480 Mbps connection speed.



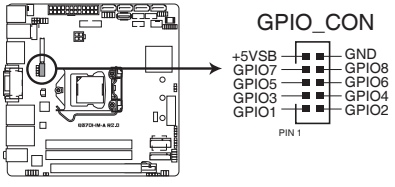
Connector type	Header 2x5p, K9, 2.54mm pitch

CAUTION! Never connect a 1394 cable to the USB connector. Doing so will damage the motherboard.

NOTE: The USB cable is purchased separately.

4. General purpose input/output connector (GPIO_CON)

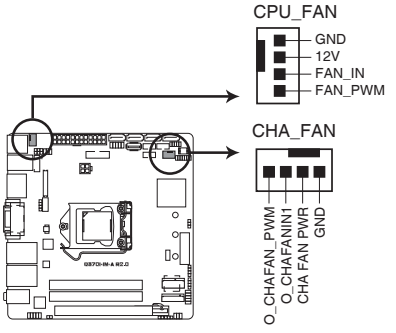
This connector is for a general purpose input/output module which allows you to customize the digital signal input/output.



Connector type	WAFER HD 2x5p, 2.0mm pitch, S/T

5. CPU and chassis fan connectors (4-pin CPU_FAN, 4-pin CHA_FAN)

Connect the fan cables to the fan connectors on the motherboard, ensuring that the black wire of each cable matches the ground pin of the connector.

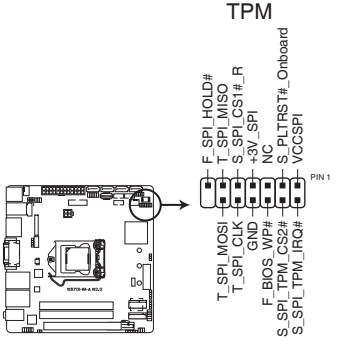


Connector type	WAFER HD 4p, 2.54mm pitch, S/T

CAUTION! Do not forget to connect the fan cables to the fan connectors. Insufficient air flow inside the system may damage the motherboard components. These are not jumpers! Do not place jumper caps on the fan connectors!

6. TPM connector (14-1 pin SPI_TPM)

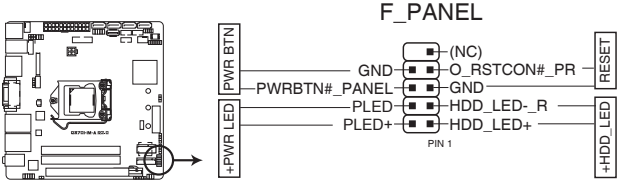
This connector supports a Trusted Platform Module (TPM) system with a Serial Peripheral Interface (SPI), allowing you to securely store keys, digital certificates, passwords and data. A TPM system also enhances network security, protects digital identities, and ensures platform integrity.



Connector type	Header 2x7p, K14, 2.0mm pitch

7. Front panel system panel connector (10-1 pin F_PANEL)

This connector supports several chassis-mounted functions.



Connector type	Header 2x5p, K10, 2.54mm pitch

- **System power LED (2-pin +PWR_LED)**

  This 2-pin connector is for the system power LED. Connect the chassis power LED cable to this connector. The system power LED lights up when you turn on the system power, and blinks when the system is in sleep mode.
- **Hard disk drive activity LED (2-pin +HDD_LED)**

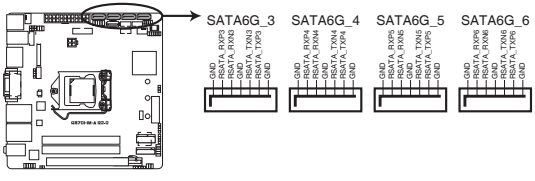
  This 2-pin connector is for the HDD Activity LED. Connect the HDD Activity LED cable to this connector. The IDE LED lights up or flashes when data is read from or written to the HDD.
- **ATX power button/soft-off button (2-pin PWR_BTN)**

  This 2-pin connector is for the system power button.
- **Reset button (2-pin RESET)**

  This 2-pin connector is for the chassis-mounted reset button for system reboot without turning off the system power.

8. Serial ATA 6.0Gb/s connectors (7-pin SATA6G_3/4/5/6)

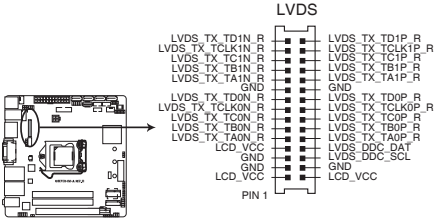
These connectors connect to Serial ATA 6.0 Gb/s hard disk drives or an optical drive via Serial ATA 6.0 Gb/s signal cables.



Connector type	WAFER HD 7p, 1.27mm pitch

9. LVDS connector (30-pin LVDS)

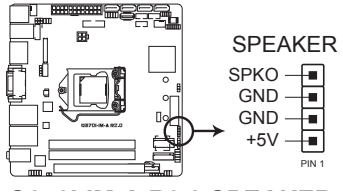
This connector is for an LCD monitor that supports Low Voltage Differential Signalling (LVDS) interface.



Connector type	WAFER HD 2x15p, 1.25mm pitch

10. Speaker connector (4-pin SPEAKER)

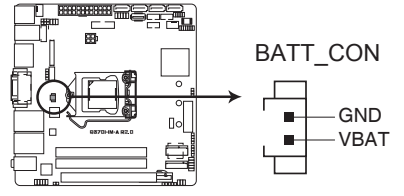
The 4-pin connector is for the chassis-mounted system warning speaker. The speaker allows you to hear system beeps and warnings.



Connector type	HEADER 1x4p, 2.54mm pitch, S/T

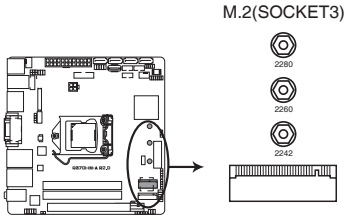
11. RTC battery connector (2-pin BATT_CON)

This connector is for the lithium CMOS battery.



12. M.2 socket 3

This socket allows you to install an M.2 SSD module.

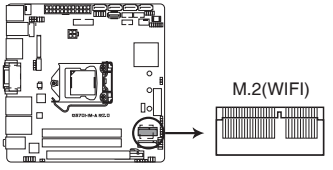


NOTES:

- The M.2 SSD module is purchased separately.
- This socket supports M Key and 2242/2260/2280 storage devices.

13. M.2 Wi-Fi

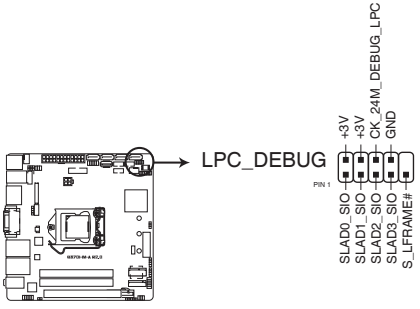
This socket connects to an M.2 Wi-Fi device.



NOTE: The M.2 Wi-Fi module is purchased separately.

14. LPC Debug header

This header allows connection to a LPC Debug card.



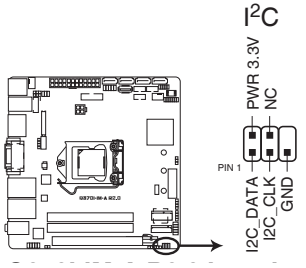
Connector type	HEADER 2x5p, K10, 2.0mm pitch

IMPORTANT!

- Scan the QR code to view the meaning of each debugging code.
- Debugging codes are only available for ASUS LPC Debug cards.
- Contact your region sales representative for LPC Debug cards ordering.

15. I²C connector

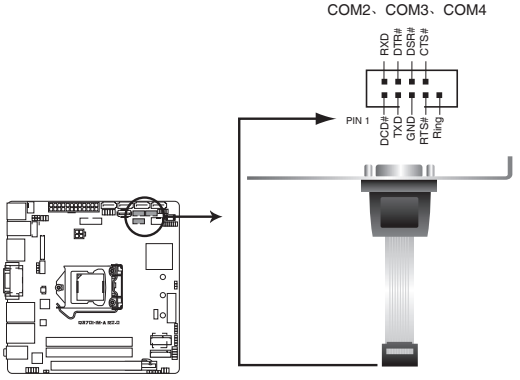
The I²C (Inter-Integrated Circuit) connector allows you to connect an I²C compatible IoT security module.



Connector type	Header 2x3p, K6, 2.0mm pitch

16. Serial port connectors (10-pin COM2, COM3, COM4)

These connectors are for serial (COM) ports. Connect the serial port cables to these connectors, then install the module to a slot opening at the back of the system chassis.

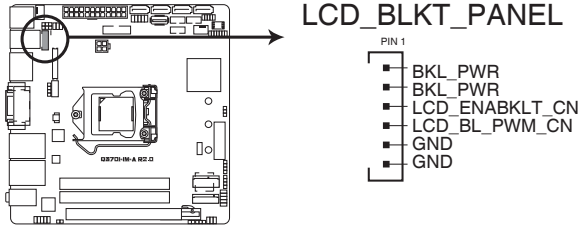


Connector type	BOX header 2x5p, K10, 2.0mm pitch

NOTE: The serial port cables are purchased separately.

17. Flat panel display brightness connector (6-pin LCD_BLKT_PANEL)

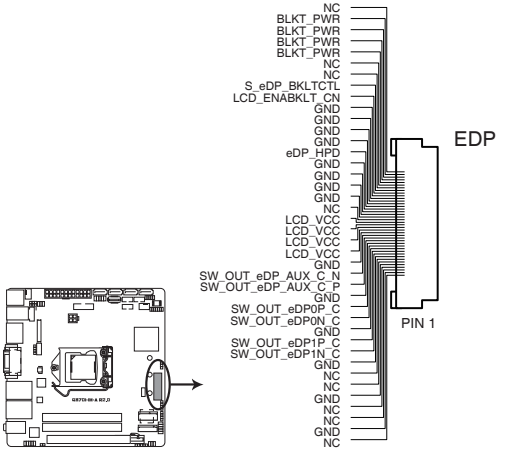
This connector is for the LCD panel brightness controls.



Connector type	WAFER 6p, 2.0mm pitch

18. Embedded DisplayPort (40- pin eDP)

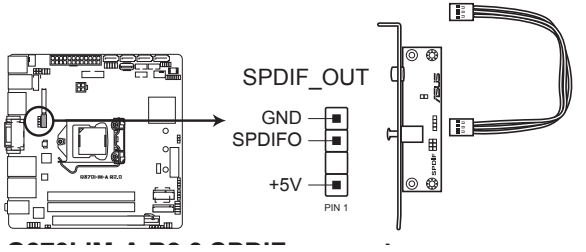
This connector is for an internal embedded DisplayPort connection.



Connector type	WtoB CON 40p, 0.5mm pitch, R/A

19. Digital audio connector (4-1 pin SPDIF_OUT)

This connector is for an additional Sony/Philips Digital Interface (S/PDIF) port. Connect the S/PDIF Out module cable to this connector, then install the module to a slot opening at the back of the system chassis.

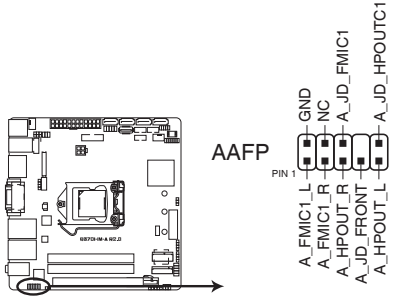


Connector type	HEADER 1x4p, K2, 2.54mm pitch

NOTE: The SPDIF Out module is purchased separately.

20. Front panel audio connector (10-1 pin AAFP)

This connector is for a chassis-mounted front panel audio I/O module that supports HD Audio standard. Connect one end of the front panel audio I/O module cable to this connector.



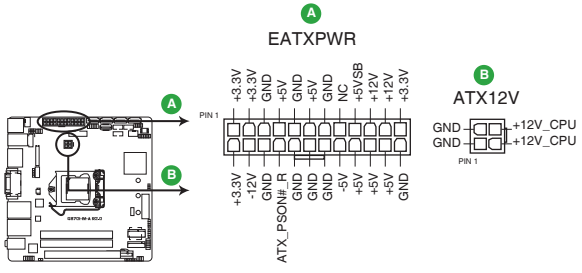
Connector type	HEADER 2x5p, K8, 2.54mm pitch

IMPORTANT!

- We recommend that you connect a high-definition front panel audio module to this connector to avail of the motherboard's high-definition audio capability.
- If you want to connect a high-definition front panel audio module to this connector, set the HD Audio Controller item in the BIOS setup to [Enabled].

21. ATX power connectors (24-pin EATXPWR, 4-pin ATX12V)

Correctly orient the ATX power supply plugs into these connectors and push down firmly until the connectors completely fit.



DC Mode EATXPWR

Pins	Signal	Pins	Signal
1	+3.3V OUT	13	+3.3V OUT
2	+3.3V OUT	14	NC
3	GND	15	GND
4	+5V OUT	16	NC
5	GND	17	GND
6	+5V OUT	18	GND
7	GND	19	GND
8	NC	20	+12V OUT
9	NC	21	+5V OUT
10	+12V IN	22	+5V OUT
11	+12V IN	23	+5V OUT
12	+3.3V OUT	24	GND

DC Mode ATX12V

Pins	Signal	Pins	Signal
1	GND	3	+12V IN
2	GND	4	+12V IN

Chapter 3
BIOS setup

Scan the QR code to view the BIOS update guide.

3.1 BIOS Setup program

Use the BIOS Setup program to update the BIOS or configure its parameters. The BIOS screens include navigation keys and brief online help to guide you in using the BIOS Setup program.

Entering BIOS Setup at startup

To enter BIOS Setup at startup:

Press <Delete> or <F2> during the Power-On Self Test (POST). If you do not press <Delete> or <F2>, POST continues with its routines.

Entering BIOS Setup after POST

To enter BIOS Setup after POST:

- Press **<Ctrl>+<Alt>+<Del>** simultaneously.
- Press the reset button on the system chassis.
- Press the power button to turn the system off then back on. Do this option only if you failed to enter BIOS Setup using the first two options.

NOTE: Using the power button, reset button, or the <Ctrl>+<Alt>+<Del> keys to reboot a running operating system can cause damage to your data or system. Always shut down the system properly from the operating system.

IMPORTANT:

- Visit the ASUS website at www.asus.com to download the latest BIOS file for this motherboard.
- The default BIOS settings for this motherboard apply to most working conditions and ensures optimal performance. If the system becomes unstable after changing any BIOS settings, load the default settings to regain system stability. Select the option **Restore Defaults** under the Exit menu or press hotkey <F3>.
- The BIOS Setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.

3.1.1 BIOS menu screen

Menu bar

The menu bar on top of the screen has the following main items:

Main	For changing the basic system configuration
Advanced	For changing the advanced system settings
Security	For configuring the system security settings
Boot	For changing the system boot configuration.
Save & Exit	For selecting the save options and default options.
Event Logs	For enabling easier troubleshooting by capturing useful system information.

To select an item on the menu bar, press the right or left arrow key on the keyboard until the desired item is highlighted.

3.2 Main menu

The Main menu provides you an overview of the basic system information, and allows you to set the system date, time, language, and security settings.

3.2.1 System Date [Day MM/DD/YYYY]

Allows you to set the system date.

3.2.2 System Time [HH:MM:SS]

Allows you to set the system time.

3.3 Advanced menu

The Advanced menu items allow you to change the settings for the CPU and other system devices.

Be cautious when changing the settings of the Advanced menu items. Incorrect field values can cause the system to malfunction.

3.3.1 Start ASUS EzFlash

This item allows you to run EzFlash utility. When you press <Enter>, a confirmation message appears. Use the left/right arrow key to select between [Yes] or [No], then press <Enter> to confirm your choice.

3.3.2 PCH-FW Configuration

AMT Configuration

This item allows you to configure Intel® Active Management Technology parameters.

USB Provisioning of AMT

This item allows you to enable or disable AMT USB Provisioning.

Secure Erase Configuration

Secure Erase mode

This item allows you to change the Secure Erase module behavior.

Configuration options: [Simulated] [Real]

Force Secure Erase

This item allows you to enbale or disable Force Secure Erase.

Configuration options: [Disabled] [Enabled]

OEM Flags Settings

This item allows you to configure OEM Flags.

MEBx hotkey Pressed

This item allows you to enable automatice MEBx hotkey press.

Configuration options: [Disabled] [Enabled]

MEBx Selection Screen

This item allows you to enable MEBx selection screen by pressing 1 to enter ME Configure Screen or pressing 2 to initiate a remote connection.

Configuration options: [Disabled] [Enabled]

Unconfigure ME

This item allows you to unconfigure Intel® ME by resetting the MEBx password to defualt.

Configuration options: [Disabled] [Enabled]

TPM Device Selection

This item allows you to select the TPM device. Configuration options: [dTPM] [PTT]

3.3.3 Trusted Computing

Security Device Support

This item allows you to enable or disable BIOS support for security devices. Configuration options: [Disabled] [Enabled]

3.3.4 Platform Misc Configuration

The items in this menu allow you to configure the platform-related features.

Native PCIE Enable

The following item appears only when you set **Native PCIE Enable** to **[Enabled]**.

Native ASPM

[Enabled]	OS controls the ASPM (active state power management) support for devices.
[Disabled]	BIOS controls the ASPM support for the device.

PCH - PCI Express

PCH DMI ASPM

This item allows you to control the Active State Power Management on both NB (NorthBridge) side and SB (SouthBridge) side of the DMI Link.
Configuration options: [Disabled] [L0s] [L1] [L0sL1] [Auto]

ASPM 0

This item allows you to select the ASPM state for energy-saving conditions.
Configuration options: [Disabled] [L0s] [L1] [L0sL1] [Auto]

L1 Substates

This item allows you to select the PCI Express L1 Substates settings.
Configuration options: [Disabled] [L1.1] [L1.1 & L1.2]

SA - PCI Express

DMI Link ASPM Control

This item allows you to control the Active State Power Management on both CPU and PCH (platform controller hub) Both DMI link ASPM control items of the CPU and PCH sides must be enabled for the ASPM to take effect. Configuration options: [Disabled] [L0s] [L1] [L0sL1]

ASPM

This item allows you to control ASPM for PEG 0. This has no effect if PEG is not the currently active device. Configuration options: [Disabled] [Auto] [ASPM L0s] [ASPM L1] [ASPM L0sL1]

3.3.5 CPU Configuration

The items in this menu show CPU-related information the BIOS automatically detects.

The items shown in the submenu may be different depending on the type of CPU installed.

Software Guard Extensions (SGX)

This item enables/disables the Software Guard Extensions (SGX). Configuration options: [Disabled] [Software Controlled] [Enabled]

Hardware Prefetcher

This item allows you to turn on/off the MLC streamer prefetcher. Configuration options: [Disabled] [Enabled]

Adjacent Cache Line Prefetcher

This item allows you to turn on/off prefetching adjacent cache lines. Configuration options: [Disabled] [Enabled]

Intel (VMX) Virtualization Technology

When set to **[Enabled]**, a VMM can utilize the additional hardware capabilities provided by Vanderpool Technology. Configuration options: [Disabled] [Enabled]

Active Processor Cores

This item allows you to select the number of CPU cores to activate in each processor package. Configuration options: [All] [1] [2] [3] [4] [5]

For some CPU types, only [**All**] and [**1**] appear.

Hyper-threading

The Intel Hyper-Threading Technology allows a hyper-threading processor to appear as two logical processors to the operating system, allowing the operating system to schedule two threads or processes simultaneously.

[Enabled] Two threads per activated core are enabled.

[Disabled] Only one thread per activated core is enabled.

CPU Power Management Control

This item allows you to manage and configure the CPU's power.

Boot performance mode

This item allows you to select the CPU performance state that the BIOS will set starting from reset vector.
Configuration options: [Max Battery] [Max Non-Turbo Performance] [Turo Performance]

Intel(R) SpeedStep(tm)

This item allows your system to support more than two frequency ranges.
Configuration options: [Disabled] [Enabled]

Intel(R) Speed Shift Technology

This item allows you to enable or disable Intel(R) Speed Shift Technology support. When enabled, CPPC v2 interface allows hardware controlled P-state.
Configuration options: [Disabled] [Enabled]

Turbo Mode

This item allows you to enable or disable Turbo Mode for your processor.
Configuration options: [Enabled] [Disabled]

Turbo Mode is available only when Intel® Speed Step or Intel® Speed Shift is enabled.

3.3.6 System Agent (SA) Configuration

Graphics Configuration

Allows you to select a primary display from IGFX, PEG and PCI graphical devices.

Primary Display [Auto]

Allows you to select which of the IGFX/PEG/PCI Graphics device should be the Primary Display or to select SG for switchable Gfx. Configuration options: [Auto] [IGFX] [PEG]

VT-d [Disabled]

Allows you to enable or disable VT-d function on MCH. Configuration options: [Enabled] [Disabled]

3.3.7 PCH Storage Configuration

While entering Setup, the BIOS automatically detects the presence of SATA devices. The SATA Port items show **Empty** if no SATA device is installed to the corresponding SATA port.

SATA Controller(s)

Enables or disables onboard the SATA device. Configuration options: [Disabled] [Enabled]

The following items appear only when you set **SATA Controller(s)** to **[Enabled]**.

Smart Self Test

This item allows you to enable or disable the SMART Self Test on all HDDs during POST. Configuration options: [Disabled] [Enabled]

SATA Mode Selection

This item allows you to set the SATA configuration.

[AHCI]	Set to [AHCI] when you want the SATA hard disk drives to use the AHCI (Advanced Host Controller Interface). The AHCI allows the onboard storage driver to enable advanced Serial ATA features that increases storage performance on random workloads by allowing the drive to internally optimize the order of commands.
[Intel RST Premium With Intel Optane System Acceleration]	Set to [Intel RST Premium With Intel Optane System Acceleration] when you want to create a RAID configuration from the SATA hard disk drives.

Aggressive LPM Support

This item is designed for LPM (link power management) support with a better energy saving conditions. When disabled, the hot plug function of SATA ports are disabled. Configuration options: [Disabled] [Enabled]

Hot Plug

These items allow you to enable/disable SATA Hot Plug Support. Configuration options: [Disabled] [Enabled]

M.2(SOCKET3)

Allow you to enable/disable the M.2(SOCKET3). Configuration options: [Disabled] [Enabled]

SATA6G_3~6(Gray)

Allow you to enable/disable the SATA6G_3~6 port. Configuration options: [Disabled] [Enabled]

3.3.8 Onboard Devices Configuration

HD Audio Controller

[Enabled] Enables the HD Audio Device.

[Disabled] Disables the HD Audio Device.

Intel LAN Controller

[Enabled] Enables the Intel LAN controller.

[Disabled] Disables the controller.

The following item appears only when you set **Intel LAN Controller** to **[Enabled]**.

Intel LAN PXE OPROM

This item appears only when you set the previous item to [Enabled] and allows you to enable or disable the PXE Option ROM of the Intel LAN controller. Configuration options: [Disabled] [Enabled]

Intel LAN2 Controller

[Enabled] Enables the Intel LAN2 controller.

[Disabled] Disables the controller.

The following item appears only when you set **Intel LAN2 Controller** to **[Enabled]**.

Intel LAN2 PXE OPROM

This item appears only when you set the previous item to [Enabled] and allows you to enable or disable the PXE Option ROM of the Intel LAN2 controller. Configuration options: [Disabled] [Enabled]

M.2 WiFi(E-Key)

Connectivity mode (Wi-Fi & Bluetooth)

This item allows you to enable or disable the Wi-Fi and Bluetooth connectivity module. Configuration options: [Disabled] [Enabled]

Hyper M.2X16

This item allows you to detect the SSD intalled onto the Hyper M.2 X16 card.

[Enabled] Two or three SSDs installed onto the Hyper M.2 X16 card can be detected.

[Disabled] Only one SSD installed onto the Hyper M.2 X16 card can be detected.

The number of the SSDs that can be detected varies depending on the configurations of the PCIe X16 slots.

I2C1 Controller

This item allows you to enable or disable the Serial IO Controller. Configuration options: [Enabled] [Disabled]

3.3.9 ACPI Settings

Enbale ACPI Auto Configuration

This item allows you to enable or disable BIOS ACPI auto configuration. Configuration options: [Enabled] [Disabled]

Enbale Hibernation

This item allows you to enable or disable the system's Hibernation (OS/S4 Sleep State). Configuration options: [Enabled] [Disabled]

This option may not be available on some operating systems.

ACPI Sleep State

Allows you to select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed. Configuration options: [Suspend Disabled] [S3 (Suspend to RAM)]

Lock Legacy Resources

Allows you to enable or disable Lock of Legacy Resources. Configuration options: [Enabled] [Disabled]

3.3.10 LVDS Configuration

LVDS Support

Allows you to enable or disable LVDS. Configuration options: [Enabled] [Disabled]

3.3.11 APM Configuration

Restore AC Power Loss

[S0] The system goes into on state after an AC power loss.

[S5] The system goes into off state after an AC power loss.

Power On By PCI-E

This item allows you to enable or disable the Wake-on-LAN function of the onboard LAN controller or other installed PCIe LAN cards. Configuration options: [Disabled] [Enabled]

Power On By PS/2 Keyboard

Enables or disables the system to be powered on by a PS/2 keyboard. Configuration options: [Disabled] [Enabled]

Power On By PS/2 Mouse

Enables or disables the system to be powered on by a PS/2 mouse.Configuration options: [Disabled] [Enabled]

Power On By Ring

[Enabled] Enables the Ring devices to generate a wake event.

[Disabled] Disables the Ring devices to generate a wake event.

Power On By RTC

[Enabled] When set to [Enabled], the items **RTC Alarm Date(Days)** and **Hour/ Minute/Second** are use-conffigurable with set values.

[Disabled] Disables RTC to generate a wake event.

3.3.12 NCT6116D Super IO Configuration

Serial Port 1 Configuration

Serial Port

Allows you to enable or disable the serial port (COM).Configuration options: [Disabled] [Enabled]

The following items appear only when you set **Serial Port** to **[Enabled]**.

Mode Select

Allows you to select the Serial Port mode. Configuration options: [RS232] [RS422] [RS485]

Change Settings

Allows you to select an optimal setting for Super I/O devices. Configuration options: [Auto] [IO=3F8h; IRQ=4;] [IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;]

Serial Port 2 Configuration

Serial Port

Allows you to enable or disable the serial port (COM).Configuration options: [Disabled] [Enabled]

The following item appears only when you set **Serial Port** to **[Enabled]**.

Change Settings

Allows you to select an optimal setting for Super I/O devices. Configuration options: [Auto] [IO=2F8h; IRQ=3;] [IO=3F8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2F8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;]

Serial Port 3 Configuration

Serial Port

Allows you to enable or disable the serial port (COM).Configuration options: [Disabled] [Enabled]

The following item appears only when you set **Serial Port** to **[Enabled]**.

Change Settings

Allows you to select an optimal setting for Super I/O devices. Configuration options: [Auto] [IO=3E8h; IRQ=7;] [IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2F0h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E0h; IRQ=3,4,5,6,7,9,10,11,12;]

Serial Port 4 Configuration

Serial Port

Allows you to enable or disable the serial port (COM).Configuration options: [Disabled] [Enabled]

The following item appears only when you set **Serial Port** to **[Enabled]**.

Change Settings

Allows you to select an optimal setting for Super I/O devices. Configuration options: [Auto] [IO=2E8h; IRQ=7;] [IO=3E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E8h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2F0h; IRQ=3,4,5,6,7,9,10,11,12;] [IO=2E0h; IRQ=3,4,5,6,7,9,10,11,12;]

3.3.13 NCT6116D HW Monitor

Q-Fan Configuration

CPU Q-Fan Control

[Disabled] Disables the CPU Q-Fan control feature.

[PWM Mode] Enable the CPU Q-Fan control in PWM mode for 4-pin CPU fan.

CPU Fan Step UP/Down

This item appears only when you enable the CPU Q-Fan Control feature and allows you to set the CPU Fan Step Up/Down time.

Configuration options: [0 sec] [2.1 sec] [2.8 sec] [3.6 sec] [4.2 sec] [5.0 sec] [6.3 sec] [8.5 sec] [12 sec] [25 sec]

CPU Fan Speed Low Limit

This item appears only when you enable the CPU Q-Fan Control feature and allows you to disable or set the CPU fan warning speed. Configuration options: [Ignore] [200RPM] [300 RPM] [400 RPM] [500 RPM] [600RPM]

CPU Fan Profile [Standard]

This item appears only when you enable the CPU Q-Fan Control feature and allows you to set the appropriate performance level of the CPU fan.

[Standard] Sets to [Standard] to make the CPU fan automatically adjust depending on the CPU temperature.

[Silent] Sets to [Silent] to minimize the fan speed for quiet CPU fan operation.

[Turbo] Sets to [Turbo] to achieve maximum CPU fan speed.

[Manual] Sets to [Manual] to assign detailed fan speed control parameters.

The following four items appear only when you set **CPU Fan Profile** to [Manual].

CPU Upper Temperature

Use the <+> and <-> keys to adjust the upper limit of the CPU temperature. The CPU fan will operate at the maximum duty cycle when the CPU temperature is higher than the limit.

CPU Fan Max. Duty Cycle(%)

Use the <+> and <-> keys to adjust the maximum CPU fan duty cycle. When the CPU temperature reaches the upper limit, the CPU fan will operate at the maximum duty cycle.

CPU Middle Temperature

Use the <+> and <-> keys to adjust the CPU middle temperature.

CPU Fan Middle. Duty Cycle(%)

Use the <+> or <-> keys to adjust the CPU fan middle duty cycle.

CPU Lower Temperature

Use the <+> or <-> keys to adjust the lower limit of the CPU temperature. The CPU fan will operate at the minimum duty cycle when the CPU temperature is lower than the limit.

CPU Fan Min. Duty Cycle(%)

Use the <+> and <-> keys to adjust the minimum CPU fan duty cycle. When the CPU temperature is lower than the lower limit, the CPU fan will operate at the minimum duty cycle.

Chassis Fan(s) Configuration

Chassis Fan1 Q-Fan Control

This item allows you to set the chassis fan operating mode.

[PWM Mode] Enables the Chassis Fan Q-Fan Control feature in PWM mode for 4-pin chassis fan.

[DC Mode] Enables the Chassis Fan Q-Fan Control feature in DC mode for 3-pin chassis fan.

[Disabled] Disables the Q-Fan control.

Chassis Fan1 Q-Fan Source

The assigned fan will be controlled according to the selected temperature source.

Configuration options: [CPU] [MotherBoard]

Chassis Fan1 Step UP/Down

This item allows you to set the Chassis Fan Step Up/Down time.

Configuration options: [0 sec] [12 sec] [25 sec] [51 sec] [76 sec] [102 sec] [127 sec] [153 sec] [178 sec] [204 sec]

Chassis Fan1 Speed Low Limit

This item allows you to disable or set the chassis fan warning speed.

Configuration options: [Ignore] [200 RPM] [300 RPM] [400 RPM] [500 RPM] [600 RPM]

Chassis Fan1 Profile

This item allows you to set the appropriate performance level of the chassis fan.

[Standard] Sets to [Standard] to make the chassis fan automatically adjust depending on the chassis temperature.

[Silent] Sets to [Silent] to minimize the fan speed for quiet chassis fan operation.

[Turbo] Sets to [Turbo] to achieve maximum chassis fan speed.

[Manual] Sets to [Manual] to assign detailed fan speed control parameters.

The following items appear only when you set **Chassis Fan1 Profile** to **[Manual].**

Chassis Fan1 Upper Temperature

Use the <+> or <-> keys to adjust the upper limit of the Chassis Fan1 temperature. The Chassis Fan1 will operate at the maximum duty cycle when the temperature source is higher than the limit.

Chassis Fan1 Max. Duty Cycle (%)

Use the <+> or <-> keys to adjust the maximum Chassis Fan1 duty cycle. When the temperature source reaches the upper limit, the Chassis Fan1 will operate at the maximum duty cycle.

Chassis Fan1 Middle Temperature

Use the <+> or <-> keys to adjust the middle limit of the Chassis Fan1 temperature.

Chassis Fan1 Middle. Duty Cycle (%)

Use the <+> or <-> keys to adjust the Chassis Fan1 middle duty cycle.

Chassis Fan1 Lower Temperature

Use the <+> or <-> keys to adjust the lower limit of the Chassis Fan1 temperature. The Chassis Fan1 will operate at the minimum duty cycle when the temperature source is lower than the limit.

Chassis Fan1 Min. Duty Cycle(%)

Use the <+> or <-> keys to adjust the minimum Chassis Fan1 duty cycle. When the temperature source is under the limit, the Chassis Fan1 will operate at the minimum duty cycle.

3.3.14 Serial Port Console Redirection

Console Redirection

Allows you enable or disable the console redirection feature. Configuration options: [Enabled] [Disabled]

Legacy Console Redirection Settings

Redirection COM Port

Allows you to select a COM port to display redirection of Legacy OS and Legacy OPROM Messages.
Configuration options: [COM1] [COM2] [COM3] [COM4] [COM5 (Disabled)] [COM6 (Disabled)]

Resolution

This allows you to set the number of rows and columns supported on the Legacy OS.
Configuration options: [80x24] [80x25]

Redirection After POST

This setting allows you to specify if Bootloader is selected than Legacy console redirection.

[Always Enable]	Legacy Console Redirection is enabled for Legacy OS.
[Bootloader]	Legacy Console Redirection is disabled before booting to Legacy OS.

3.3.15 Intel TXT Information

This menu displays the Intel TXT information.

3.3.16 USB Configuration

The USB Devices item lists auto-detected values. If no USB device is detected, the item shows None.

Legacy USB Support

[Enabled] Enables the support for USB devices on legacy operating systems (OS).

[Disabled] USB devices are only available when running BIOS Setup.

[Auto] Allows the system to detect the presence of USB devices at startup. If detected, the USB controller legacy mode is enabled. If no USB device is detected, the legacy USB support is disabled.

XHCI Hand-off

This item is set to [Disabled] by default for the EHCI (enhanced host controller interface) support by XHCI drivers in operating systems.

[Disabled] Support XHCI by XHCI drivers for operating systems with XHCI support.

[Enabled] Support XHCI by BIOS for operating systems without XHCI support.

USB Mass Storage Driver Support

Allows you to enable or disable the USB Mass Storage driver support. Configuration options: [Disabled] [Enabled]

USB Port Disable Override

Allows you to selectively enable or disable the corresponding USB port from reporting a Device connection to the controller.

U32G1_1-6

Allows you to enable or disable USB port. Once set to **[Disabled]**, any USB devices plugged into the connector will not be detected by BIOS or OS. Configuration options: [Disabled] [Enabled]

USB7-9

Allows you to enable or disable USB port. Once set to **[Disabled]**, any USB devices plugged into the connector will not be detected by BIOS or OS. Configuration options: [Disabled] [Enabled]

U32G1_10, USB_10-13

Allows you to enable or disable USB port. Once set to **[Disabled]**, any USB devices plugged into the connector will not be detected by BIOS or OS. Configuration options: [Disabled] [Enabled]

3.3.17 NVMe Configuration

This menu displays the NVMe controller and drive information of the connected devices.

3.3.18 HDD Secure Erase

This menu displays the HDD that supports Secure Erase function.

3.3.19 Dynamic Digital IO

The items listed in this screen configure Digital IO settings.

DIO 0~7 Direction

Configuration options: [Input] [Output]

The following item appears only when you set **DIO 0~7** to **[Output]**.

Output Level [H]

Configuration options: [H] [L]

3.3.20 Network Stack Configuration

Network Stack

This item allows user to disable or enable the UEFI network stack. Configuration options: [Disabled] [Enabled]

The following two items appear only when you set the previous item to [Enabled].

Ipv4 PXE Support

This item allows user to disable or enable the Ipv4 PXE Boot support. Configuration options: [Disabled] [Enabled]

Ipv6 PXE Support

This item allows user to disable or enable the Ipv6 PXE Boot support. Configuration options: [Disabled] [Enabled]

3.4 Security menu

This menu allows a new password to be created or a current password to be changed. The menu also enables or disables the Secure Boot state and lets the user configure the System Mode state.

Administrator Password

If you have set an administrator password, we recommend that you enter the administrator password for accessing the system.

To set an administrator password:

1. Select the **Administrator Password** item and press <Enter>.
2. From the **Create New Password** box, key in a password, then press <Enter>.
3. Confirm the password when prompted.

To change an administrator password:

1. Select the **Administrator Password** item and press <Enter>.
2. From the **Enter Current Password** box, key in the current password, then press <Enter>.
3. From the **Create New Password box**, key in a new password, then press <Enter>.
4. Confirm the password when prompted.

To clear the administrator password, follow the same steps as in changing an administrator password, but press <Enter> when prompted to create/confirm the password.

User Password

If you have set a user password, you must enter the user password for accessing the system. The **User Password** item on top of the screen shows the default **Not Installed**. After you set a password, this item shows **Installed**.

To set a user password:

1. Select the **User Password** item and press <Enter>.
2. From the **Create New Password** box, key in a password, then press <Enter>.
3. Confirm the password when prompted.

To change a user password:

1. Select the **User Password** item and press <Enter>.
2. From the **Enter Current Password** box, key in the current password, then press <Enter>.
3. From the **Create New Password** box, key in a new password, then press <Enter>.
4. Confirm the password when prompted.

To clear a user password:

1. Select the **Clear User Password** item and press <Enter>.
2. Select **Yes** from the Warning message window then press <Enter>.

Secure Boot

Secure Boot can be enabled if the system is running in User mode with enrolled platform Key (EPK) or if the CSM function is disabled.
Configuration options: [Disabled] [Enabled]

Key Management

The Key Management item allows you to modify Secure Boot variables and set Key Management page.

Restore Factory Keys

Force System to User Mode. Configure NVRAM to contain OEM-defined factory default Secure Boot keys.

Reset to Setup Mode

Delete NVRAM content of all UEFI Secure Boot key databases.

Export Secure Boot Variables

Copy NVRAM content of source Boot variables to files in a root folder on a file system device.

Platform Key (PK)

Configuration options: [Details] [Export] [Update] [Delete]

Key Exchange Keys / Authorized Signatures / Forbidden Signatures

Configuration options: [Details] [Export] [Update] [Append] [Delete]

3.5 Boot menu

The Boot menu items allow you to change the system boot options.

CSM Configuration

CSM Support

This option allows you to enable or disable CSM Support.
Configuration options: [Disabled] [Enabled]

Fast Boot [Enabled]

[Enabled] Select to accelerate the boot speed.

[Disabled] Select to go back to normal boot speed.

The following item appears only when you set **Fast Boot** to **[Enabled]**.

SATA Support

[Last Boot SATA Devices Only] Only last boot SATA device will be available in POST.

[All SATA Devices] All SATA devices will be available in OS and POST.

[HDD Only]

NVMe Support

This item allows you to enable or disable NVMe Support. Configuration options: [Disabled] [Enabled]

VGA Support

[Auto] Only installs the Legacy OpRom with Legacy OS and logo will not be shown during POST.

[EFI Driver] EFI driver will still be installed with the EFI OS.

USB Support

[Disabled] All USB devices will NOT be available until after OS boot.

[Full Initial] All USB devices will be available in OS and POST.

[Partial Initial] USB Mass Storage and specific USB port/device will NOT be available before OS boot.

Network Stack Driver Support

[Disabled] Network Stack Driver will be skipped.

[Enabled] Network Stack Driver will not be skipped.

Redirection Support

Allows you to enable or disable the Redirection function.
Configuration options: [Disabled] [Enabled]

Setup Prompt Timeout

Allows you to set the number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
Configuration options: [1] - [65535]

Boot up NumLock State

[On] Set the power-on state of the NumLock to [On].

[Off] Set the power-on state of the NumLock to [Off].

Chassis Intrusion Detection

Allows you to enable or disable the chassis intrusion detection function.
Configuration options: [Disabled] [Enabled]

Wait For 'F1' If Error

When this item is set to [Enabled], the system waits for the F1 key to be pressed when error occurs.
Configuration options: [Disabled] [Enabled]

Quiet Boot

Allows you to enable or disable the Quiet Boot option.
Configuration options: [Disabled] [Enabled]

Boot Option Priorities

These items specify the boot device priority sequence from the available devices. The number of device items that appears on the screen depends on the number of devices installed in the system.

To select the boot device during system startup, press <F8> when ASUS Logo appears.

3.6 Save & Exit menu

The Save & Exit menu items allow you to save or discard your changes to the BIOS items.

Discard Changes & Exit

This option allows you to exit the Setup program without saving your changes. When you select this option or if you press <Esc>, a confirmation window appears. Select **Yes** to discard changes and exit.

Save Changes & Reset

This option allows you to exit the Setup program after saving changes.

Restore Defaults

Restore/load default values for all the setup options.

3.7 Event Logs

A built-in event log enables easier troubleshooting by capturing useful system information.

Change Smbios Event Log Settings

Allows you to change the Smbios event log configuration.

Smbios Event Log

Configuration options: [Disabled] [Enabled]

Erase Event Log

Allows you to choose options for erasing Smbios Event Log.
Configuration options: [No] [Yes, Next reset] [Yes, Every reset]

When Log is Full

Allows you to choose options for reactions to a full Smbios Event Log.
Configuration options: [Do Nothing] [Erase Immediately]

Log System Boot Event

Allows you to enbale or disable logging of the system boot event.
Configuration options: [Enabled] [Disabled]

MECI

Configuration options: [1] - [255]

METW

Configuration options: [0] - [99]

Log EFI Status Code

Configuration options: [Disabled] [Enabled]

Convert EFI Status Codes to Standard Smbios Type

Configuration options: [Disabled] [Enabled]

View Smbios Event Log

Allows you to view all the events in the Smbios event logs.

Appendix

Notices

FCC Compliance Information

Responsible Party:	Asus Computer International
Address:	48720 Kato Rd., Fremont, CA 94538, USA
Phone / Fax No:	(510)739-3777 / (510)608-4555

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Compliance Statement of Innovation, Science and Economic Development Canada (ISED)

This device complies with Innovation, Science and Economic Development Canada licence exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

CAN ICES-003(B)/NMB-003(B)

Déclaration de conformité de Innovation, Sciences et Développement économique Canada (ISED)

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CAN ICES-003(B)/NMB-003(B)

VCCI: Japan Compliance Statement

Class B ITE

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取扱説明書に従って正しい取り扱いをして下さい。

VCCI－B

Japan JATE

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Regional notice for California

WARNING

Cancer and Reproductive Harm -
www.P65Warnings.ca.gov

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Manufacturer	ASUSTek COMPUTER INC.
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