

**PRIME
B860-PLUS**

ASUS
Motherboard

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Safety information

Electrical safety


- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system.
- When adding or removing devices to or from the system, ensure that the power cables for the devices are unplugged before the signal cables are connected. If possible, disconnect all power cables from the existing system before you add a device.
- Before connecting or removing signal cables from the motherboard, ensure that all power cables are unplugged.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Ensure that your power supply is set to the correct voltage in your area. If you are not sure about the voltage of the electrical outlet you are using, contact your local power company.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.

Operation safety

- Before installing the motherboard and adding devices on it, carefully read all the manuals that came with the package.
- Before using the product, ensure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- To avoid short circuits, keep paper clips, screws, and staples away from connectors, slots, sockets and circuitry.
- Avoid dust, humidity, and temperature extremes. Do not place the product in any area where it may become wet.
- Place the product on a stable surface.
- If you encounter technical problems with the product, contact a qualified service technician or your retailer.
- Your motherboard should only be used in environments with ambient temperatures between 10°C and 35°C.

Button/Coin Batteries Safety Information

1. Remove and immediately recycle or dispose of used batteries according to local regulations and keep out of reach of children. Do not incinerate or dispose of batteries in household trash.
2. If ingested or inserted inside any part of the body, call a local poison control center for treatment information. Even used batteries may cause serious injury or death.
3. This product uses CR2032 type batteries with a nominal voltage of 3V.
4. Do not attempt to recharge non-rechargeable batteries.
5. Do not forcibly discharge, recharge, disassemble, heat above the battery manufacturer's specified temperature rating, or incinerate. Doing so may result in injury or chemical burns caused by venting, leakage, or explosion.
6. This product contains non-replaceable batteries.

⚠ WARNING	
<ul style="list-style-type: none">• INGESTION HAZARD: This product contains a button cell or coin battery.• DEATH or serious injury can occur if ingested.• A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.• KEEP new and used batteries OUT OF REACH of CHILDREN.• Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.	

About this guide

This user guide contains the information you need when installing and configuring the motherboard.

How this guide is organized

This guide contains the following parts:

- **Chapter 1: Product Introduction**
This chapter describes the features of the motherboard and includes descriptions for each part of the motherboard.
- **Chapter 2: BIOS and RAID Support**
This chapter tells how to boot into the BIOS, upgrade BIOS using the EZ Flash Utility and support on RAID.

Where to find more information

Refer to the following sources for additional information and for product and software updates.

1. **ASUS website**
The ASUS website (www.asus.com) provides updated information on ASUS hardware and software products.
2. **Optional documentation**
Your product package may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not part of the standard package.
3. **Motherboard Installation Guide**
Please visit <https://www.asus.com/support> for more information on the Motherboard Installation Guide.



4. **Driver and Utilities FAQ**
Please visit <https://www.asus.com/support> for more information on downloading and installing drivers and utilities for your motherboard.



5. RAID Configuration Guide

Please visit <https://www.asus.com/support> for more information on the RAID Configuration Guide.



Conventions used in this guide

To ensure that you perform certain tasks properly, take note of the following notes used throughout this user guide.

CAUTION	Information to prevent damage to the components and injuries to yourself when trying to complete a task.
IMPORTANT	Instructions that you MUST follow to complete a task.
NOTE	Tips and additional information to help you complete a task.

Package contents

Check your motherboard package for the following items.

Motherboard	1 x PRIME B860-PLUS motherboard
Cables	2 x SATA 6Gb/s cables
Miscellaneous	1 x M.2 rubber package
	2 x Screw packages for M.2 SSD
	1 x Screw package for M.2 Key E
Documentation	1 x Quick start guide

NOTE:

- If any of the above items is damaged or missing, contact your retailer.
 - Items not listed in the Package contents list above are purchased separately and do not come bundled with your motherboard package.
-

PRIME B860-PLUS specifications summary

CPU	<p>Supports Intel® Core™ Ultra Processors (Series 2), LGA1851</p> <p>Supports Intel® Turbo Boost Technology 2.0 and Intel® Turbo Boost Max Technology 3.0**</p> <p>* Refer to https://www.asus.com/support/download-center/ for CPU support list.</p> <p>** Intel® Turbo Boost Max Technology 3.0 support depends on the CPU types.</p>
Chipset	Intel® B860 Chipset
Memory	<p>4 x DIMM slots, Max. 192GB, DDR5</p> <p>Support up to 8666+MT/s (OC), Non-ECC, Un-buffered, Clocked Unbuffered DIMM (CUDIMM)*</p> <p>Dual channel memory architecture</p> <p>DIMM Fit</p> <p>Supports Intel® Extreme Memory Profile (XMP) memory module</p> <p>ASUS Enhanced Memory Profile III (AEMP III)</p> <p>* Supported memory types, data rate (speed), and number of DRAM modules vary depending on the CPU and memory configuration, for more information please refer to CPU/Memory Support list under the Support tab of product information site or visit https://www.asus.com/support/download-center/. Adjustments will be made based on the specifications of mass-produced memory products available on the market.</p> <p>* Non-ECC, un-buffered DDR5 memory supports On-Die ECC function.</p>
Graphics	<p>1 x DisplayPort**</p> <p>1 x HDMI™ port***</p> <p>* Graphics specifications may vary between CPU types. Please refer to www.intel.com for any updates.</p> <p>** Supports max. 4K@60Hz as specified in DisplayPort 1.4.</p> <p>*** Supports 4K@60Hz as specified in HDMI 2.1.</p> <p>**** VGA resolution support depends on processors' or graphic cards' resolution.</p>
Expansion Slots	<p>Intel® Core™ Ultra Processors (Series 2)*</p> <p>- 1 x PCIe 5.0 x16 slot</p> <p>Intel® B860 Chipset</p> <p>- 1 x PCIe 4.0 x16 slot (supports x4 mode)</p> <p>* To ensure compatibility of the device installed, please refer to https://www.asus.com/support/download-center/ for the list of supported peripherals.</p>
Storage	<p>Total supports 3 x M.2 slots and 4 x SATA 6Gb/s ports*</p> <p>Intel® Core™ Ultra Processors (Series 2)*</p> <p>- M.2_1 slot (Key M), type 2242/2260/2280 (supports PCIe 5.0 x4 mode)</p> <p>Intel® B860 Chipset</p> <p>- M.2_2 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)</p> <p>- M.2_3 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)</p> <p>- 4 x SATA 6Gb/s ports</p> <p>* Intel® Rapid Storage Technology supports SATA RAID 0/1/5/10.</p>
Ethernet	<p>1 x Realtek 2.5Gb Ethernet</p> <p>ASUS LANGuard</p>
Wireless & Bluetooth®	<p>M.2 slot only (Key E, CNVi & PCIe)*</p> <p>* Wi-Fi module is sold separately.</p>

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PRIME B860-PLUS specifications summary

<p>USB</p>	<p>Rear USB (Total 6 ports) 1 x USB 20Gbps port (1 x USB Type-C®) 2 x USB 10Gbps ports (2 x Type-A) 1 x USB 5Gbps port (1 x Type-A) 2 x USB 2.0 ports (2 x Type-A)</p> <p>Front USB (Total 7 ports) 1 x USB 5Gbps port (1 x USB Type-C®) 1 x USB 5Gbps header supports 2 additional USB 5Gbps ports 2 x USB 2.0 headers support 4 additional USB 2.0 ports</p>
<p>Audio</p>	<p>Realtek 7.1 Surround Sound High Definition Audio CODEC*</p> <ul style="list-style-type: none"> - Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking - Supports up to 24-Bit/192 kHz playback <p>Audio Features</p> <ul style="list-style-type: none"> - Audio Shielding - Premium audio capacitors - Dedicated audio PCB layers <p>* A chassis with an HD audio module in the front panel is required to support 7.1 Surround Sound audio output.</p>
<p>Back Panel I/O Ports</p>	<p>1 x USB 20Gbps port (1 x USB Type-C®) 2 x USB 10Gbps ports (2 x Type-A) 1 x USB 5Gbps port (1 x Type-A) 2 x USB 2.0 ports (2 x Type-A) 1 x DisplayPort 1 x HDMI™ port 1 x Realtek 2.5Gb Ethernet port 3 x Audio jacks</p>
<p>Internal I/O connectors</p>	<p>Fan and Cooling Related</p> <ul style="list-style-type: none"> 1 x 4-pin CPU Fan header 1 x 4-pin CPU OPT Fan header 1 x 4-pin AIO Pump header 4 x 4-pin Chassis Fan headers <p>Power Related</p> <ul style="list-style-type: none"> 1 x 24-pin Main Power connector 1 x 8-pin +12V CPU Power connector <p>Storage Related</p> <ul style="list-style-type: none"> 3 x M.2 slots (Key M) 4 x SATA 6Gb/s ports <p>USB</p> <ul style="list-style-type: none"> 1 x USB 5Gbps connector (supports USB Type-C®) 1 x USB 5Gbps header supports 2 additional USB 5Gbps ports 2 x USB 2.0 headers support 4 additional USB 2.0 ports

(continued on the next page)

PRIME B860-PLUS specifications summary

<p>Internal I/O connectors</p>	<p>Miscellaneous</p> <ul style="list-style-type: none"> 3 x Addressable Gen 2 headers 1 x Aura RGB header 1 x Clear CMOS header 1 x Chassis Intrusion header 1 x COM Port header 1 x Front Panel Audio header (F_AUDIO) 1 x S/PDIF Out header 1 x SPI TPM header (14-1pin) 1 x 10-1 pin Front Panel System header 1 x Thunderbolt™ (USB4®) header
<p>Special Features</p>	<p>ASUS 5X PROTECTION III</p> <ul style="list-style-type: none"> - DIGI+ VRM (- Digital power design with DrMOS) - LANGuard - Overvoltage protection - SafeSlot - Stainless-steel back I/O <p>ASUS Q-Design</p> <ul style="list-style-type: none"> - Q-Dashboard - Q-DIMM - Q-LED (CPU [red], DRAM [yellow], VGA [white], Boot Device [yellow green]) - Q-Slot <p>ASUS Thermal Solution</p> <ul style="list-style-type: none"> - Flexible M.2 heatsink - VRM heatsink design <p>ASUS EZ DIY</p> <ul style="list-style-type: none"> - ProCool - Pre-mounted I/O shield <p>Aura Sync</p> <ul style="list-style-type: none"> - Aura RGB header - Addressable Gen 2 headers
<p>Software Features</p>	<p>ASUS Exclusive Software</p> <ul style="list-style-type: none"> Armoury Crate - Aura Creator - Aura Sync - Fan Xpert 2+ - Power Saving <p>ASUS AI Advisor</p> <p>ASUS DriverHub</p> <p>ASUS CPU-Z</p>

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PRIME B860-PLUS specifications summary

Software Features	Adobe Creative Cloud (Free Trial) Norton 360 Deluxe (60 Days Free Trial) WinRAR (40 Days Free Trial) UEFI BIOS ASUS EZ DIY - ASUS CrashFree BIOS 3 - ASUS EZ Flash - ASUS UEFI BIOS EZ Mode - ASUS MyHotkey
BIOS	2 x 128 Mb Flash ROM, UEFI AMI BIOS
BIOS CAP Filename	PRIME B860-PLUS: A5627.cap
Manageability	WOL by PME, PXE
Operating System	Windows 11 (22H2 & later) Windows 10 64-bit (21H2 & later)
Form Factor	ATX Form Factor 12 inch x 9.6 inch (30.5 cm x 24.4 cm)

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

Product Introduction

1.1 Before you proceed

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

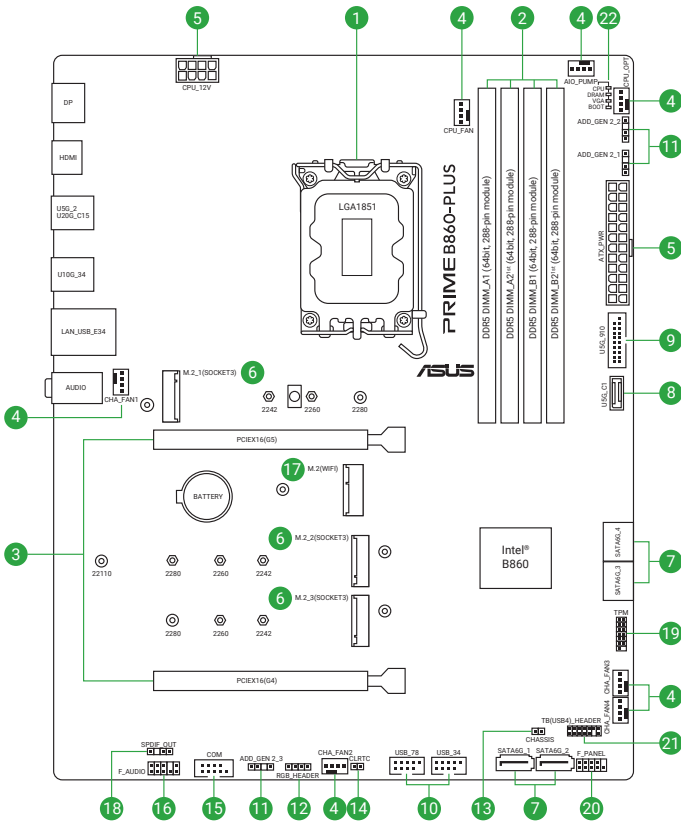
CAUTION!

- 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, ensure that the power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components.

NOTE:

- The pin definitions in this chapter are for reference only. The pin names depend on the location of the header/jumper/connector.
 - The illustrations for this chapter are for reference only.
-

1.2 Motherboard layout



1.2.1 Layout contents

1. CPU socket

The motherboard comes with an Intel® Socket LGA1851 for Intel® Core™ Ultra Processors (Series 2).

NOTE: For more details, refer to [CPU installation](#).

2. DIMM slots

The motherboard comes with Dual Inline Memory Modules (DIMM) slots designed for DDR5 (Double Data Rate 5) memory modules.

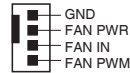
NOTE: For more details, refer to **DIMM installation**.

3. Expansion slots

This motherboard supports two PCIe x16 graphics cards that comply with the PCI Express specification.

4. Fan and Pump headers

The Fan and Pump headers allow you to connect fans or pumps to cool the system.



5. Power connectors

These Power connectors allow you to connect your motherboard to a power supply. The power supply plugs are designed to fit in only one orientation. Find the proper orientation and push down firmly until the power supply plugs are fully inserted.

CAUTION! Ensure to connect the 8-pin power plug.

NOTE:

- We recommend that you use a PSU with a higher power output when configuring a system with more power-consuming devices. The system may become unstable or may not boot up if the power is inadequate.
 - If you want to use two high-end PCI Express x16 cards, we recommend using a PSU with 900W~1200W power or above to ensure the system stability.
 - PSU input: AC 100~240V, 6A/3A, 50/60Hz.
-

6. M.2 slots (Key M)

The M.2 slots allow you to install M.2 devices such as M.2 SSD modules.

NOTE:

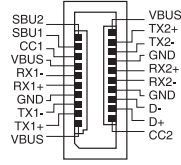
- **Intel® Core™ Ultra Processors (Series 2)**
M.2_1 slot (Key M), type 2242/2260/2280 (supports PCIe 5.0 x4 mode)
 - **Intel® B860 Chipset**
M.2_2 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)
M.2_3 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)
 - Intel® Rapid Storage Technology supports SATA RAID 0/1/5/10.
-

7. SATA 6Gb/s ports

The SATA 6Gb/s ports allow you to connect SATA devices such as optical disc drives and hard disk drives via SATA cables.

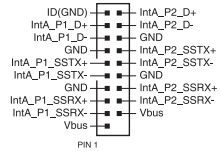
8. USB 5Gbps Type-C® Front Panel connector

The USB 5Gbps Type-C® connector allows you to connect a USB 5Gbps Type-C® module for an additional USB 5Gbps Type-C® port. The USB 5Gbps Type-C® connector provides data transfer speeds of up to 5 Gb/s.



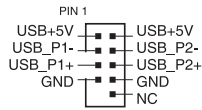
9. USB 5Gbps header

The USB 5Gbps header allows you to connect a USB 5Gbps module for additional USB 5Gbps ports. The USB 5Gbps header provides data transfer speeds of up to 5 Gb/s.



10. USB 2.0 header

The USB 2.0 header allow you to connect USB modules for additional USB 2.0 ports. The USB 2.0 header provides data transfer speeds of up to 480 Mb/s.

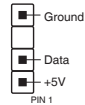


CAUTION! DO NOT connect a 1394 cable to the USB connectors. Doing so will damage the motherboard!

11. Addressable Gen 2 headers

The Addressable Gen 2 headers allow you to connect individually addressable RGB (ARGB) WS2812B LED strips or WS2812B based LED strips.

ADD_GEN 2



CAUTION! Before you install or remove any component, ensure that the power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components.

NOTE:

- The Addressable Gen 2 header supports addressable RGB LED strips (5V/Data/Ground), with a maximum power rating of 3A (5V). Additionally, the addressable header on this board can support up to 120 LEDs per header in Gen1 mode, or a combined maximum of 500 LEDs in Gen2 mode.
- Actual lighting and color will vary with LED strip.
- If your LED strip does not light up, check if the addressable RGB LED strip is connected in the correct orientation, and the 5V connector is aligned with the 5V header on the motherboard.
- The addressable RGB LED strip will only light up when the system is powered on.

12. Aura RGB header

The Aura RGB header allows you to connect RGB LED strips.



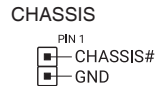
CAUTION! Before you install or remove any component, ensure that the power supply is switched off or the power cord is detached from the power supply. Failure to do so may cause severe damage to the motherboard, peripherals, or components.

NOTE:

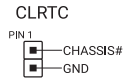
- The Aura RGB header supports 5050 RGB multi-color LED strips (12V/G/R/B), with a maximum power rating of 3A (12V).
 - Actual lighting and color will vary with LED strip.
 - If your LED strip does not light up, check if the RGB LED extension cable and the RGB LED strip is connected in the correct orientation, and the 12V connector is aligned with the 12V header on the motherboard.
 - The LED strip will only light up when the system is powered on.
-

13. Chassis Intrusion header

The Chassis Intrusion header allows you to connect an intrusion sensor or microswitch for the chassis intrusion detection feature. When you remove any chassis component, the sensor or microswitch triggers and sends a high level signal and records a chassis intrusion event.

**14. Clear CMOS header**

The Clear CMOS header allows you to clear the Real Time Clock (RTC) RAM in the CMOS, which contains the date, time, system passwords, and system setup parameters.



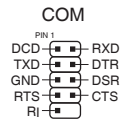
To erase the RTC RAM:

1. Turn OFF the computer and unplug the power cord.
2. Short-circuit pin 1-2 with a metal object or jumper cap for about 5-10 seconds.
3. Plug the power cord and turn ON the computer.
4. Hold down the key during the boot process and enter BIOS setup to re-enter data.

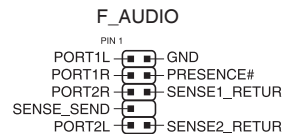
CAUTION! DO NOT short-circuit the pins except when clearing the RTC RAM. Short-circuiting or placing a jumper cap will cause system boot failure!

15. COM Port header

The COM (Serial) Port header allows you to connect a COM port module. Connect the COM port module cable to this header, then install the module to a slot opening on the system chassis.

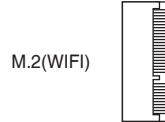
**16. Front Panel Audio header**

The Front Panel Audio header is for a chassis-mounted front panel audio I/O module that supports HD Audio. Connect one end of the front panel audio I/O module cable to this header.



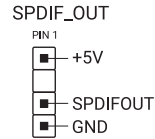
17. M.2 slot (Key E)

The M.2 Wi-Fi slot allows you to install an M.2 Wi-Fi module (E-key, type 2230; CNVi & PCIe interface).



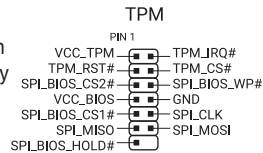
18. S/PDIF Out header

The S/PDIF Out header allows you to connect the Sony/Philips Digital Interface (S/PDIF) Out module.



19. SPI TPM header

This header 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 helps enhance network security, protects digital identities, and ensures platform integrity.



20. Front Panel System header

The Front Panel System header supports several chassis-mounted functions.

- **System power LED header (+PWR_LED-)**

The 2-pin header allows you to connect the System power LED. The System power LED lights up when the system is connected to a power source, or when you turn on the system power, and blinks when the system is in sleep mode.

- **Storage Device Activity LED header (+HDD_LED-)**

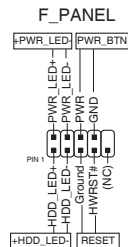
The 2-pin header allows you to connect the Storage Device Activity LED. The Storage Device Activity LED lights up or blinks when data is read from or written to the storage device or storage device add-on card.

- **Power Button/Soft-off Button header (PWR_BTN)**

The 3-1 pin header allows you to connect the system power button. Press the power button to power up the system, or put the system into sleep or soft-off mode (depending on the operating system settings).

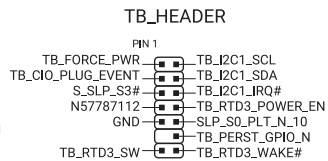
- **Reset button header (RESET)**

The 2-pin header allows you to connect the chassis-mounted reset button. Press the reset button to reboot the system.



21. Thunderbolt™ (USB4®) header

The Thunderbolt™ (USB4®) header allows you to connect an add-on Thunderbolt™ I/O card that supports Intel®'s Thunderbolt™ Technology, allowing you to connect Thunderbolt™-enabled devices to form a daisy-chain configuration.







NOTE: Please visit the official website of your purchased add-on card for more details on compatibility.

IMPORTANT! The Thunderbolt™ card can only be used when installed to the PCIEX16(G4) slot. Ensure to install your Thunderbolt™ card to the PCIEX16(G4) slot.

22. Q-LEDs

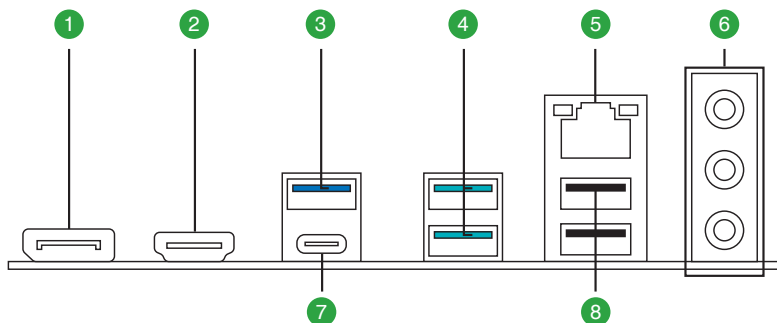
The Q-LEDs check key components (CPU, DRAM, VGA, and booting devices) during the motherboard booting process. If an error is found, the critical component's LED stays lit up until the problem is solved.

CPU (RED)	
DRAM (YELLOW)	
VGA (WHITE)	
BOOT (YELLOW GREEN)	

NOTE:

- The Q-LEDs provide the most probable cause of an error code as a starting point for troubleshooting. The actual cause may vary from case to case.
 - *DRAM installation detection function:* The DRAM LED will detect if the memory modules have been installed in the recommended memory configuration slots as well as if the memory modules have been properly installed and seated in the memory slots once the motherboard is connected to a power supply. After the motherboard has been powered on, the DRAM LED will return to the original error checking procedure, regardless of the LED status prior to powering on.
-

1.2.2 Rear panel connectors



Rear panel connectors

- | | |
|----|--|
| 1. | DisplayPort |
| 2. | HDMI™ port |
| 3. | USB 5Gbps Type-A port 2 |
| 4. | USB 10Gbps (Teal blue) Type-A ports 3, 4 |
| 5. | Realtek 2.5Gb Ethernet port* |
| 6. | Audio jacks** |
| 7. | USB 20Gbps Type-C® port |
| 8. | USB 2.0 ports E3, E4 |

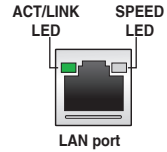
* and **: Refer to the tables under LAN port LEDs, and Audio I/O connections sections.

NOTE: We strongly recommend that you connect your devices to ports with matching data transfer rate. For example connecting your USB 5Gbps devices to USB 5Gbps ports for faster and better performance for your devices.

1.2.3 LAN port LEDs

Realtek 2.5Gb Ethernet port LED indications

Activity Link LED		Speed LED	
Status	Description	Status	Description
OFF	No link	OFF	No link
GREEN	Linked	GREEN	2.5 Gbps connection
BLINKING	Data activity	ORANGE	1 Gbps / 100 Mbps / 10 Mbps connection



1.2.4 Audio I/O connections

Audio 2, 4, 5.1 or 7.1-channel configuration

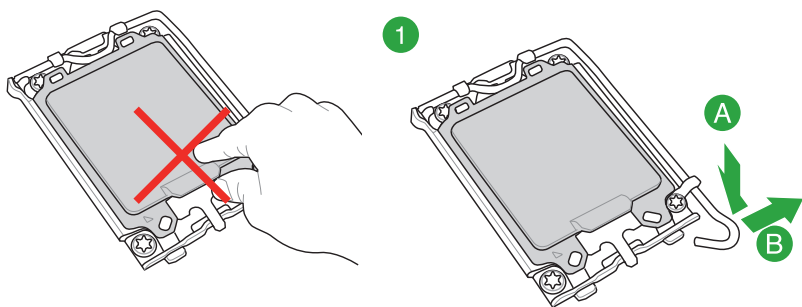
Port	2-channel	4-channel	5.1-channel	7.1-channel
Rear panel				
LINE IN	-	Rear Speaker Out	Rear Speaker Out	Rear Speaker Out
LINE OUT	Front Speaker Out	Front Speaker Out	Front Speaker Out	Front Speaker Out
MIC IN	-	-	Center/ Subwoofer	Center/ Subwoofer
Front panel				
HEADPHONE (Lime)	-	-	-	Side Speaker Out
MIC IN (Pink)	-	-	-	-

1.3 CPU installation

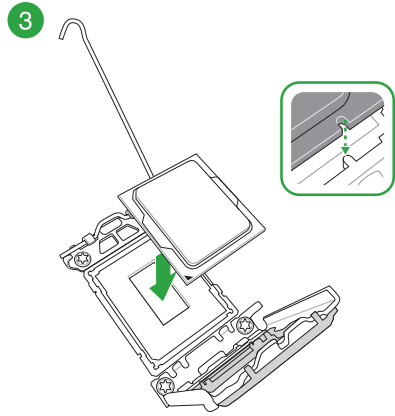
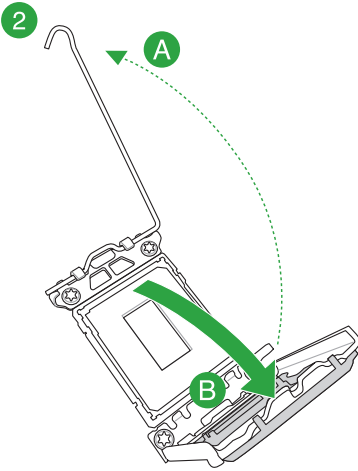
CAUTION!

- Ensure that you install the correct CPU designed for LGA1851 socket only. DO NOT install a CPU designed for LGA1155, LGA1156, LGA1151, LGA1200, and LGA1700 sockets on the LGA1851 socket.
- The CPU fits in only one correct orientation. DO NOT force the CPU into the socket to prevent bending the connectors on the socket and damaging the CPU.
- Ensure that all power cables are unplugged before installing the CPU.
- 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. ASUS will shoulder the cost of repair only if the damage is shipment/transit-related.

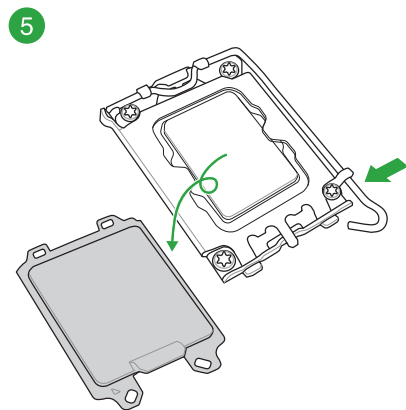
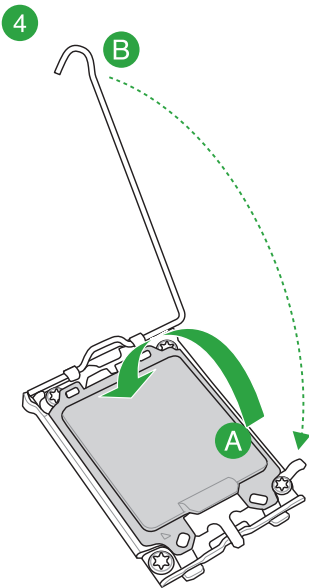
IMPORTANT! Install a heatsink or AIO cooler after installing the CPU. Please refer to the **Motherboard Installation Guide** on the ASUS support site, or to the user manual of the heatsink/AIO cooler for steps on installing the heatsink/AIO cooler.



CAUTION! Take caution when lifting the load lever, ensure to hold onto the load lever when releasing the load lever. Letting go of the load lever immediately after releasing it may cause the load lever to spring back and cause damage to your motherboard.



IMPORTANT! Ensure the notches on the CPU are properly aligned to the tabs in the CPU socket, and the triangle mark on the CPU socket is aligned to the same corner as the triangle mark on the socket.



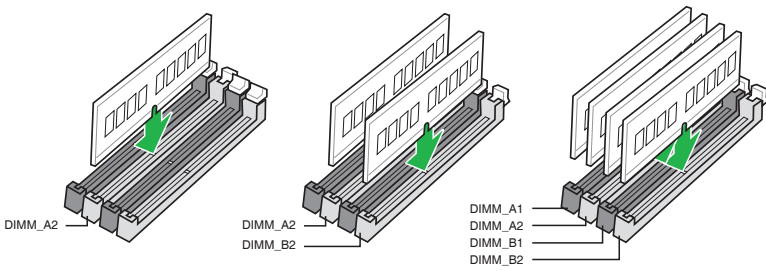
1.4 DIMM installation

The figure illustrates the location of the DDR5 DIMM sockets.



CAUTION! A DDR5 memory module is notched differently from a DDR, DDR2, DDR3, or DDR4 module. DO NOT install a DDR, DDR2, DDR3, or DDR4 memory module to the DDR5 slot.

Recommended memory configurations



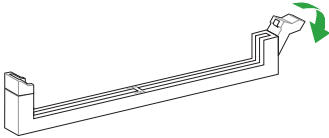
You may install Non-ECC DDR5 DIMMs into the DIMM sockets.

NOTE:

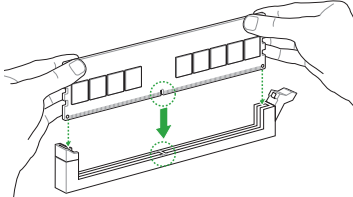
- The default memory operation frequency is dependent on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under the default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value.
 - For system stability, use a more efficient memory cooling system to support a full memory load or overclocking condition.
 - Always install the DIMMs with the same CAS Latency. For an optimum compatibility, we recommend that you install memory modules of the same version or data code (D/C) from the same vendor. Check with the vendor to get the correct memory modules.
 - Visit the ASUS website for the latest QVL.
-

Installing a DIMM

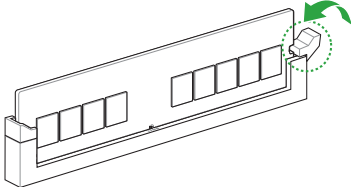
1



2



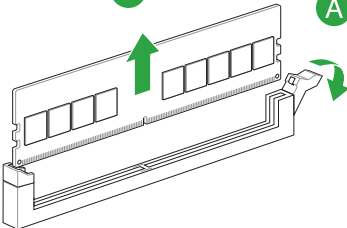
3



Removing a DIMM

B

A



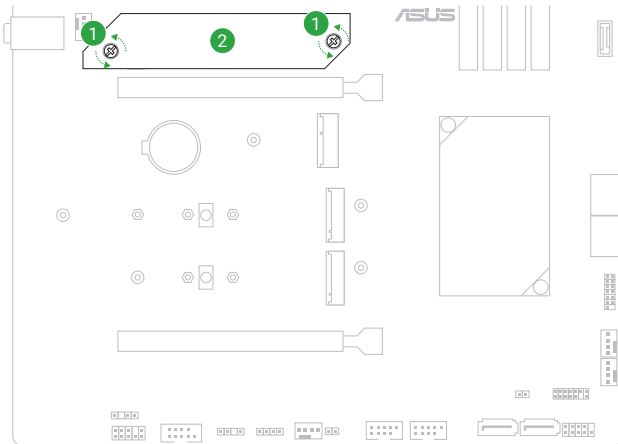
1.5 M.2 module installation

NOTE:

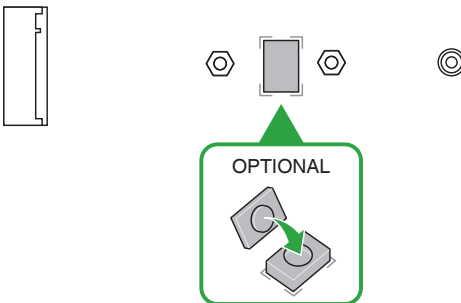
- The illustrations only show the installation steps for selected M.2 slots, the steps are the same for the other M.2 slots.
- Use a Phillips screwdriver when removing or installing the screws or screw stands mentioned in this section.
- If the thermal pad on the M.2 heatsink becomes damaged, we recommend replacing it with a thermal pad with a thickness of 1.25mm.
- Supported M.2 type varies per motherboard.

Installing an M.2 module to the M.2 1 slot

1. Loosen the screws from the M.2 heatsink.
2. Lift and remove the heatsink.

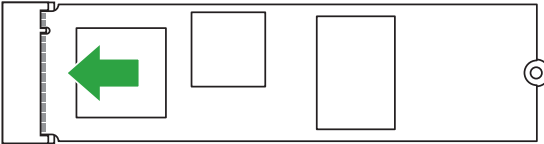


3. (optional) Install the bundled M.2 rubber if you are installing a single sided M.2 module. DO NOT install the bundled M.2 rubber when installing a double-sided M.2 module.



4. Install your M.2 module to the M.2 slot.

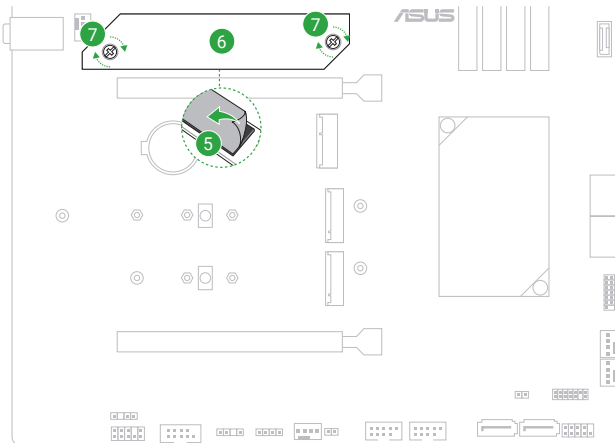
IMPORTANT! Ensure that there is nothing obstructing your M.2 module when installing the M.2 module to the M.2 slot.



5. Remove the plastic film from the thermal pads on the bottom of the heatsink.

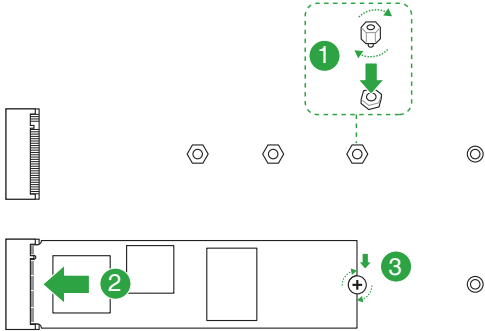
NOTE: If the thermal pad on the M.2 heatsink becomes damaged, we recommend replacing it with a thermal pad with a thickness of 1.25mm.

6. Replace the heatsink.
7. Secure the heatsink using the screws on the heatsink.



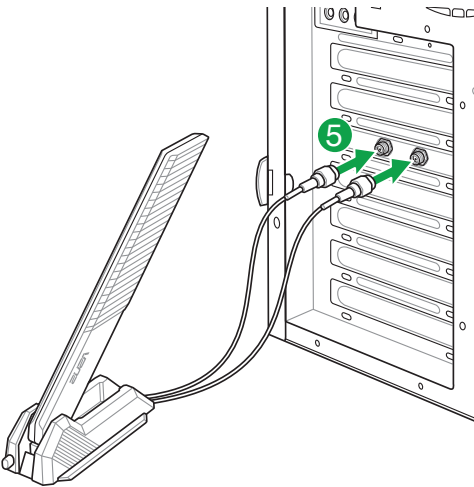
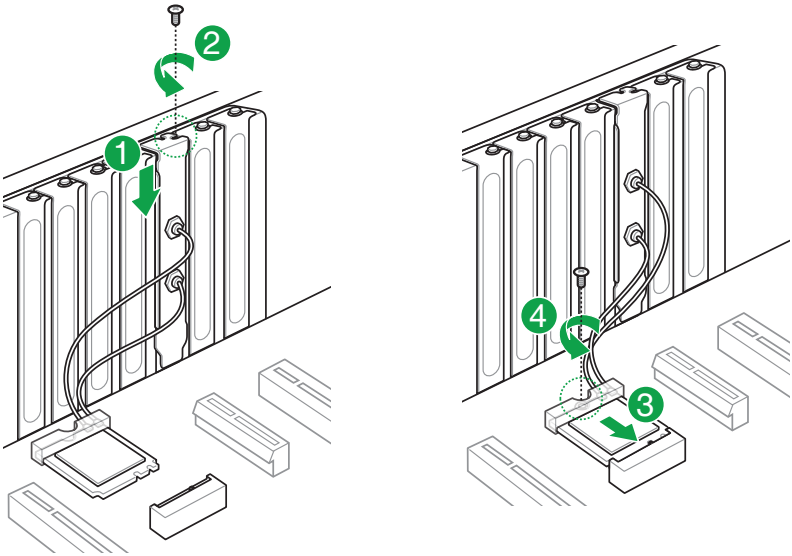
Installing an M.2 module to the M.2 2/3 slot

- 1. Install the bundled screw stand to the M.2 length screw hole you wish to install your M.2 module to.
- 2. Install your M.2 module to the M.2 slot.
- 3. Secure your M.2 module using the bundled screw stand's screw.



1.6 M.2 Wi-Fi module and antenna installation

Installing the M.2 W-Fi Module



IMPORTANT!

- Ensure that the ASUS Wi-Fi moving antenna is securely installed to the Wi-Fi ports.
- Ensure that the antenna is at least 20 cm away from all persons.

NOTE:

- The illustration to the left is for reference only. The I/O port layout may vary with models, but the Wi-Fi antenna installation procedure is the same for all models.
- The M.2 Wi-Fi module and antenna are purchased separately.

BIOS and RAID Support

NOTE: For more details on BIOS configurations, please refer to Manual & Document under the Support tab of the product information site, or visit <https://www.asus.com/support>.

2.1 Knowing UEFI BIOS

BIOS (Basic Input and Output System) stores system hardware settings such as storage device configuration, overclocking settings, advanced power management, and boot device configuration that are needed for system startup in the motherboard CMOS. In normal circumstances, the default BIOS settings apply to most conditions to ensure optimal performance. **DO NOT change the default BIOS settings** except in the following circumstances:

- An error message appears on the screen during the system bootup and requests you to run the BIOS Setup.
- You have installed a new system component that requires further BIOS settings or update.

CAUTION! Inappropriate BIOS settings may result to instability or boot failure. **We strongly recommend that you change the BIOS settings only with the help of a trained service personnel.**

NOTE: BIOS settings and options may vary due to different BIOS release versions. Please refer to the latest BIOS version for settings and options.

Entering BIOS 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.

IMPORTANT!

- If the system becomes unstable after changing any BIOS setting, load the default settings to ensure system compatibility and stability. Select the **Load Optimized Defaults** item under the **Exit** menu or press the <F5> hotkey.
 - If the system fails to boot after changing any BIOS setting, try to clear the CMOS and reset the motherboard to the default value.
 - The BIOS setup program does not support Bluetooth devices.
-

BIOS menu screen

The BIOS Setup program can be used under two modes: **EZ Mode** and **Advanced Mode**. You can change modes from **Setup Mode** in **Boot menu** or by pressing the <F7> hotkey.

2.2 ASUS EZ Flash

The ASUS EZ Flash feature allows you to update the BIOS without using an OS-based utility.

IMPORTANT! Ensure to load the BIOS default settings to ensure system compatibility and stability. Select the **Load Optimized Defaults** item under the **Exit** menu or press the <F5> hotkey.

To update the BIOS:

CAUTION!

- This function can support devices such as a USB flash disk with FAT 32/16 format and single partition only.
 - DO NOT shut down or reset the system while updating the BIOS to prevent system boot failure!
-

1. Insert the USB flash disk that contains the latest BIOS file to the USB port.
2. Enter the Advanced Mode of the BIOS setup program. Go to the **Tool** menu to select **ASUS EZ Flash Utility** and press <Enter>.
3. Press the Left arrow key to switch to the **Drive** field.
4. Press the Up/Down arrow keys to find the USB flash disk that contains the latest BIOS, and then press <Enter>.
5. Press the Right arrow key to switch to the **Folder** field.
6. Press the Up/Down arrow keys to find the BIOS file, and then press <Enter> to perform the BIOS update process. Reboot the system when the update process is done.

2.3 ASUS CrashFree BIOS 3

The ASUS CrashFree BIOS 3 utility is an auto recovery tool that allows you to restore the BIOS file when it fails or gets corrupted during the updating process. You can restore a corrupted BIOS file using a USB flash drive that contains the BIOS file.

Recovering the BIOS

1. Download the latest BIOS version for this motherboard from <https://www.asus.com/support/>.
2. Rename the file using one of the following methods:
 - Launch the **BIOSRenamer.exe** application to automatically rename the file.
 - Manually rename the file to the BIOS CAP filename specified in the **Specifications summary** section.
 - Manually rename the file to **asus.cap**.
3. Copy the renamed file to your USB storage device.
4. Turn on the system.
5. Insert the USB flash drive containing the BIOS file to a USB port.
6. The utility automatically checks the devices for the BIOS file. When found, the utility reads the BIOS file and enters ASUS EZ Flash automatically.
7. The system requires you to enter BIOS Setup to recover the BIOS setting. To ensure system compatibility and stability, we recommend that you press the <F5> hotkey to load default BIOS values.

CAUTION! DO NOT shut down or reset the system while updating the BIOS! Doing so may cause system boot failure!

2.4 RAID configurations

The motherboard supports RAID configurations.

RAID definitions

RAID 0 (Data striping) optimizes two identical hard disk drives to read and write data in parallel, interleaved stacks. Two hard disks perform the same work as a single drive but at a sustained data transfer rate, double that of a single disk alone, thus improving data access and storage. Use of two new identical hard disk drives is required for this setup.

RAID 1 (Data mirroring) copies and maintains an identical image of data from one drive to a second drive. If one drive fails, the disk array management software directs all applications to the surviving drive as it contains a complete copy of the data in the other drive. This RAID configuration provides data protection and increases fault tolerance to the entire system. Use two new drives or use an existing drive and a new drive for this setup. The new drive must be of the same size or larger than the existing drive.

RAID 5 stripes both data and parity information across three or more hard disk drives. Among the advantages of RAID 5 configuration include better HDD performance, fault tolerance, and higher storage capacity. The RAID 5 configuration is best suited for transaction processing, relational database applications, enterprise resource planning, and other business systems. Use a minimum of three identical hard disk drives for this setup.

RAID 10 is data striping and data mirroring combined without parity (redundancy data) having to be calculated and written. With the RAID 10 configuration you get all the benefits of both RAID 0 and RAID 1 configurations. Use four new hard disk drives or use an existing drive and three new drives for this setup.

Appendix

General 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.

HDMI Trademark Notice

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

The logo consists of the letters 'HDMI' in a bold, black, sans-serif font. The 'H' and 'M' are significantly larger and more prominent than the 'D' and 'I'. A small 'TM' trademark symbol is located to the upper right of the 'I'.

HIGH-DEFINITION MULTIMEDIA INTERFACE

安全上のご注意

付属品は当該専用品です。他の機器には使用しないでください。機器の破損もしくは、火災や感電の原因となることがあります。

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。

V C C I - B

インターネット回線への接続に関するご注意

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Australia statement notice

From 1 January 2012 updated warranties apply to all ASUS products, consistent with the Australian Consumer Law. For the latest product warranty details please visit <https://www.asus.com/support/>. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

If you require assistance please call ASUS Customer Service 1300 2787 88 or visit us at <https://www.asus.com/support/>.

Declaration of compliance for product environmental regulation

ASUS follows the green design concept to design and manufacture our products, and makes sure that each stage of the product life cycle of ASUS product is in line with global environmental regulations. In addition, ASUS disclose the relevant information based on regulation requirements.

Please refer to <https://esg.asus.com/Compliance.htm> for information disclosure based on regulation requirements ASUS is complied with:

EU REACH and Article 33

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at <https://esg.asus.com/Compliance.htm>.

EU RoHS

This product complies with the EU RoHS Directive. For more details, see <https://esg.asus.com/Compliance.htm>

India RoHS

This product complies with the “India E-Waste (Management) Rules, 2016” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) in concentrations exceeding 0.1% by weight in homogenous materials and 0.01% by weight in homogenous materials for cadmium, except for the exemptions listed in Schedule II of the Rule.

Vietnam RoHS

ASUS products sold in Vietnam, on or after September 23, 2011, meet the requirements of the Vietnam Circular 30/2011/TT-BCT.

Các sản phẩm ASUS bán tại Việt Nam, vào ngày 23 tháng 9 năm 2011 trở về sau, đều phải đáp ứng các yêu cầu của Thông tư 30/2011/TT-BCT của Việt Nam.

Türkiye RoHS

AEEE Yönetmeliğine Uygundur

ASUS Recycling/Takeback Services

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components as well as the packaging materials. Please go to <https://esg.asus.com/en/Takeback.htm> for detailed recycling information in different regions.



DO NOT throw the motherboard in municipal waste. This product has been designed to enable proper reuse of parts and recycling. This symbol of the crossed out wheeled bin indicates that the product (electrical and electronic equipment) should not be placed in municipal waste. Check local regulations for disposal of electronic products.



DO NOT throw the mercury-containing button cell battery in municipal waste. This symbol of the crossed out wheeled bin indicates that the battery should not be placed in municipal waste.

France sorting and recycling information



Points de collecte sur www.quefairedemesdechets.fr
Privilégiez la réparation ou le don de votre appareil !

Notices for non Wi-Fi model

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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)

Le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

KC: Korea Warning Statement

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이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

Simplified UKCA Declaration of Conformity

ASUSTeK Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of related UKCA Directives. Full text of UKCA declaration of conformity is available at: www.asus.com/support

Simplified EU Declaration of Conformity

English ASUSTeK Computer Inc. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of related Directives. Full text of EU declaration of conformity is available at: www.asus.com/support

Français ASUSTeK Computer Inc. déclare par la présente que cet appareil est conforme aux critères essentiels et autres clauses pertinentes des directives concernées. La déclaration de conformité de l'UE peut être téléchargée à partir du site Internet suivant : www.asus.com/support

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Italiano ASUSTeK Computer Inc. con la presente dichiara che questo dispositivo è conforme ai requisiti essenziali e alle altre disposizioni pertinenti con le direttive correlate. Il testo completo della dichiarazione di conformità UE è disponibile all'indirizzo: www.asus.com/support

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Ελληνικά Με το παρόν, η ASUSTeK Computer Inc. δηλώνει ότι αυτή η συσκευή συμμορφώνεται με τις θεμελιώδεις απαιτήσεις και άλλες σχετικές διατάξεις των Οδηγιών της ΕΕ. Το πλήρες κείμενο της δηλώσης συμμορφότητας είναι διαθέσιμο στη διεύθυνση: www.asus.com/support

Magyar Az ASUSTeK Computer Inc. ezennel kijelenti, hogy ez az eszköz megfelel a kapcsolódó Irányelviek lényeges követelményeinek és egyéb vonatkozó rendelkezéseinek. Az EU megfeleléségi nyilatkozat teljes szövege innen letölthető: www.asus.com/support

Latviski ASUSTeK Computer Inc. ar šo paziņo, ka šī ierīce atbilst saistīto Direktīvu būtiskajām prasībām un citiem citiem saistošajiem nosacījumiem. Pilns ES atbilstības paziņojuma teksts pieejams šeit: www.asus.com/support

Lietuvių „ASUSTeK Computer Inc.“ šiuo tvirtina, kad šis įrenginys atitinka pagrindinius reikalavimus ir kitas svarbias susijusių direktyvų nuostatas. Visą ES atitikties deklaracijos tekstą galima rasti: www.asus.com/support

Norsk ASUSTeK Computer Inc. erklærer herved at denne enheten er i samsvar med hovedsaklige krav og andre relevante forskrifter i relaterte direktiver. Fullstendig tekst for EU-samsvarserklæringen finnes på: www.asus.com/support

Polski Firma ASUSTeK Computer Inc. niniejszym oświadcza, że urządzenie to jest zgodne z zasadniczymi wymogami i innymi właściwymi postanowieniami powiązanych dyrektyw. Pełny tekst deklaracji zgodności UE jest dostępny pod adresem: www.asus.com/support

Português A ASUSTeK Computer Inc. declara que este dispositivo está em conformidade com os requisitos essenciais e outras disposições relevantes das Diretivas relacionadas. Texto integral da declaração da UE disponível em: www.asus.com/support

Română ASUSTeK Computer Inc. declară că acest dispozitiv se conformează cerințelor esențiale și altor prevederi relevante ale directivelor conexe. Textul complet al declarației de conformitate a Uniunii Europene se găsește la: www.asus.com/support

Srpski ASUSTeK Computer Inc. ovim izjavljuje da je ovaj uređaj u saglasnosti sa osnovnim zahtevima i drugim relevantnim odredbama povezanih Direktiva. Pun tekst EU deklaracije u saglasnosti je dostupan da adresi: www.asus.com/support

Slovensky Spoločnosť ASUSTeK Computer Inc. týmto vyhlasuje, že toto zariadenie vyhovuje základným požiadavkám a ostatným príslušným ustanoveniam príslušných smerníc. Celý text vyhlásenia o zhode pre štáty EÚ je dostupný na adrese: www.asus.com/support

Slovenščina ASUSTeK Computer Inc. izjavlja, da je ta naprava skladna z bistvenimi zahtevami in drugimi ustreznimi določbami povezanih direktiv. Celotno besedilo EU-izjave o skladnosti je na voljo na spletnem mestu: www.asus.com/support

Español Por la presente, ASUSTeK Computer Inc. declara que este dispositivo cumple los requisitos básicos y otras disposiciones pertinentes de las directivas relacionadas. El texto completo de la declaración de la UE de conformidad está disponible en: www.asus.com/support

Svenska ASUSTeK Computer Inc. förklarar härmed att denna enhet överensstämmer med de grundläggande kraven och andra relevanta föreskrifter i relaterade direktiv. Fulltext av EU-försäkran om överensstämmelse finns på: www.asus.com/support

Türkçe ASUSTeK Computer Inc., bu aygıtın temel gereksinimlerle ve ilişkili Yönergelerin diğer ilgili koşullarına uyumlu olduğunu beyan eder. AB uygunluk bildiriminin tam metni şu adreste bulunabilir: www.asus.com/support

Українська ASUSTeK Computer Inc. заявляє, що цей пристрій відповідає основним вимогам та іншим відповідним положенням відповідних Директив. Повний текст декларації відповідності стандартам ЄС доступний на: www.asus.com/support

Bosnian ASUSTeK Computer Inc. ovim izjavljuje da je ovaj uređaj usklađen sa bitnim zahtjevima i ostalim odgovarajućim odredbama vezanih direktiva. Kompletan tekst EU deklaracije u usklađenosti dostupan je na: www.asus.com/support

עברית באות, ASUSTeK Computer Inc. מצהירה כי מכשיר זה תואם לדרישות החיוביות והלונטיים האחרים של החנות הקשורת. הטקסט המלא של הצהרת התאמות לאיחוד האירופי זמין בכתובת: www.asus.com/support

Warranty

EN: ASUS Guarantee Information

- ASUS offers a voluntary manufacturer's Commercial Guarantee.
- ASUS reserves the right to interpret the provisions of the ASUS Commercial Guarantee.
- This ASUS Commercial Guarantee is provided independently and in addition to the statutory Legal Guarantee and in no way affects or limits the rights under the Legal Guarantee.

For all the guarantee information, please visit <https://www.asus.com/support>.

F: Garantie ASUS

- ASUS fournit une garantie commerciale en tant que garantie volontaire du fabricant.
- ASUS se réserve le droit d'interpréter et de clarifier les informations relatives à la garantie commerciale ASUS.
- Cette garantie commerciale ASUS est fournie indépendamment et parallèlement à la garantie légale, elle n'affecte ou ne limite d'aucune façon les droits acquis par la garantie légale.

Pour plus d'informations sur la garantie, consultez le site <https://www.asus.com/fr/support/>.

G: ASUS Garantieinformationen

- ASUS bietet eine freiwillige Warengarantie des Herstellers an.
- ASUS behält sich das Recht zur Auslegung der Bestimmungen in der ASUS Warengarantie vor.
- Diese ASUS Warengarantie wird unabhängig und zusätzlich zur rechtmäßigen gesetzlichen Garantie gewährt und beeinträchtigt oder beschränkt in keiner Weise die Rechte aus der gesetzlichen Garantie.

Die vollständigen Garantieinformationen finden Sie unter <https://www.asus.com/de/support/>.

I: Informativa sulla Garanzia ASUS

- ASUS offre una Garanzia Commerciale volontaria del produttore.
- ASUS si riserva il diritto di interpretare le disposizioni della Garanzia Commerciale ASUS.
- La presente Garanzia Commerciale ASUS viene fornita in modo indipendente e in aggiunta alla Garanzia Legale prevista per legge e non pregiudica o limita in alcun modo i diritti previsti dalla Garanzia Legale.

Per tutte le informazioni sulla garanzia, visitare <https://www.asus.com/it/support>.

R: Информация о гарантии ASUS

- ASUS предлагает добровольную гарантию от производителя.
- ASUS оставляет за собой право интерпретировать положения гарантии ASUS.
- Настоящая гарантия ASUS никоим образом не ограничивает Ваши права, предусмотренные локальным законодательством.

Для получения полной информации о гарантии посетите <https://www.asus.com/ru/support/>.

BG: Информация за гаранцията от ASUS

- ASUS предлага доброволна търговска гаранция от производителя.
- ASUS си запазва правото да тълкува условията на търговската гаранция на ASUS.
- Тази търговска гаранция на ASUS се предлага независимо от и в допълнение на законната гаранция. Тя по никакъв начин не оказва влияние върху правата на потребителя в законната гаранция и по никакъв начин не ги ограничаваша.

За цялостна информация относно гаранцията, моля, посетете <https://www.asus.com/support>.

CR: Informacije o ASUS jamstvu

- ASUS dragovoljno nudi komercijalno proizvođačko jamstvo.
- ASUS zadržava prava na tumačenje odredbi ASUS komercijalnog jamstva.
- Ovo ASUS komercijalno jamstvo daje se neovisno i kao dodatak zakonskom jamstvu i ni na koji način ne ograničuje prava iz okvira zakonskog jamstva.

Sve informacije o jamstvu potražite na <https://www.asus.com/support>.

CZ: Informace o záruce společnosti ASUS

- Společnost ASUS nabízí dobrovolnou komerční záruku výrobce.
- Společnost ASUS si vyhrazuje právo vykládat ustanovení komerční záruky společnosti ASUS.
- Tato komerční záruka společnosti ASUS je poskytována nezávisle a jako doplněk zákonné záruky a žádným způsobem neovlivňuje ani neomezuje práva vyplývající ze zákonné záruky.

Všechny informace o záruce najdete na adrese <https://www.asus.com/cz/support/>.

DA: ASUS garantioplysninger

- ASUS tilbyder en valgfri handelsmæssig garanti.
- ASUS forbeholder sig retten til at fortolke bestemmelse i ASUS' handelsmæssige garanti.
- Denne handelsmæssige garanti fra ASUS tilbydes uafhængigt, som en tilføjelse til den lovbestemte juridiske garanti og den påvirker eller begrænser på ingen måde rettighederne i den juridiske garanti.

Alle garantioplysningerne kan findes på <https://www.asus.com/dk/support/>.

DU: ASUS-garantie-informatie

- SUS biedt een vrijwillige commerciële garantie van de fabrikant.
- ASUS behoudt zich het recht voor om de bepalingen van de commerciële garantie van ASUS uit te leggen.
- Deze commerciële garantie van ASUS wordt onafhankelijk en als aanvulling op de statutaire Wettelijke garantie geboden en beïnvloedt of beperkt in geen geval de rechten onder de wettelijke garantie.

Voor alle informatie over de garantie, gaat u naar <https://www.asus.com/nl/support/>.

EE: Teave ASUS-e garantii kohta

- ASUS pakub vabatahtlikku tasulist tootjagarantii.
- ASUS jätab endale õiguse tõlgendada ASUS-e tasulise garantii tingimusi.
- See ASUS-e tasuline garantii on sõltumatu lisagarantii seadusega kehtestatud garantile ega mõjuta mingil määral seadusega kehtestatud garantiid ning seadusega kehtestatud garantii piiranguid.

Vaadake garantiga seotud teavet veebisaidil <https://www.asus.com/ee/>.

FI: ASUS-takuitiedot

- ASUS tarjoaa vapaaehtoisien valmistajan kaupallisen takuun.
- ASUS pidättää oikeuden tulkita ASUS-kaupallisen takuun ehdot.
- Tämä ASUS-kaupallinen takuu tarjotaan itsenäisesti lisäaiteisen oikeudellisen takuun lisäksi eikä se vaikuta millään tavoin laillisen takuun oikeuksiin tai rajoita niitä.

Saadaksesi kaikki takuitiedot, siirry osoitteeseen <https://www.asus.com/fi/support>.

GK: Πληροφορίες εγγύησης ASUS

- H ASUS προσφέρει μια εθελοντική Εμπορική εγγύηση κατασκευαστή.
- H ASUS διατηρεί το δικαίωμα ερμηνείας των διατάξεων της Εμπορικής εγγύησης ASUS.
- Αυτή η Εμπορική εγγύηση ASUS παρέχεται ανεξάρτητα και εμπροσθέντος της θεσμικής Νομικής εγγύησης και δε καμία περίπτωση δεν επηρεάζει ή περιορίζει τα δικαιώματα βάσει της Νομικής εγγύησης.

Για όλες τις πληροφορίες εγγύησης, επισκεφθείτε τη διεύθυνση <https://www.asus.com/gr-el/>.

HUG: ASUS garanciális információk

- Az ASUS önkéntes gyártói kereskedelmi garanciát kínál.
- Az ASUS fenntartja magának a jogot, hogy értelmezze az ASUS kereskedelmi garanciára vonatkozó rendelkezéseket.
- Ezt a kereskedelmi garanciát az ASUS függetlenül és a törvényes garancia mellett nyújtja és semmilyen módon nem befolyásolja, vagy korlátozza a jogi garancia nyújtóta jogokat.

A garanciára vonatkozó teljes körű információért látogasson el a <https://www.asus.com/hu/support/> oldalra.

LT: Informacija apie ASUS garantiją

- ASUS siūlo savanorišką komercinę gamintojo garantiją.
- ASUS pasilieka teisę savo nuožūria aiskinti šios komercinės ASUS garantijos nuostatas.
- Ši komercinė ASUS garantija suteikiama nepriklausoma, be įstatyminės teisinės garantijos, ir jokia būdu nepaveikia ar neapriboja teisinės garantijos suteikiamų teisių.

Norėdami gauti visą informaciją apie garantiją, apsilankykite <https://www.asus.com/lt/>.

LV: ASUS garantijas informācija

- ASUS piedāvā brīvprātīgu ražotāja komerciālo garantiju.
- ASUS patur tiesības interpretēt ASUS komerciālās garantijas noteikumus.
- Šī ASUS komerciālā garantija tiek piedāvāta neatkarīgi un papildus likumā noteiktajai juridiskajai garantijai, un tā nekādā veidā neietekmē vai neierobežo juridiskajai garantijai noteiktās tiesības.

Lai iegūtu informāciju par garantiju, apmeklējiet vietni <https://www.asus.com/lv/>.

MX: Garantía y Soporte

Esta Garantía aplica en el país de compra. Usted acepta que en esta garantía:

- Los procedimientos de servicio pueden variar en función del país.
- Algunos servicios y/o piezas de reemplazo pudieran no estar disponibles en todos los países.
- Algunos países pueden tener tarifas y restricciones que se apliquen en el momento de realizar el servicio, visite el sitio de Soporte de ASUS en <https://www.asus.com/mx/support/> para ver más detalles.
- Si tiene alguna queja o necesidad de un centro de reparación local o el periodo de garantía del producto ASUS, por favor visite el sitio de Soporte de ASUS en <https://www.asus.com/mx/support/> para mayores detalles.

Información de contacto ASUS

Esta garantía está respaldada por:
ASUSTeK Computer Inc.
Centro de Atención ASUS +52 (55) 1946-3663

NW: Informasjón om ASUS-garanti

- ASUS tilbyr som produsent en frivillig kommersiell garanti.
- ASUS forbeholder seg retten til å tolke bestemmelsene i ASUS sin kommersielle garanti.
- ASUS sin kommersielle garanti gis uavhengig og i tillegg til den lovbestemte juridiske garantien, og verken påvirkar eller begrensar rettighetene under den juridiske garantien på noen måte.

Du finner fullstendig informasjon om garanti på <https://www.asus.com/no/support/>.

PG: Informações de Garantia ASUS

- A ASUS oferece uma Garantia Comercial voluntária do fabricante.
- A ASUS reserva o direito de interpretar as disposições da Garantia Comercial da ASUS.
- Esta Garantia Comercial da ASUS é fornecida de forma independente além da Garantia Legal estatutária e não afeta nem limita de qualquer forma os direitos estabelecidos na Garantia Legal.

Para consultar todas as informações sobre a garantia, visite <https://www.asus.com/pl/support/>.

PL: Informacje o gwarancji firmy ASUS

- Firma ASUS oferuje dobrowolną gwarancję handlową producenta.
- Firma ASUS zastrzega sobie prawo do interpretacji warunków gwarancji handlowej firmy ASUS.
- Niniejsza gwarancja handlowa firmy ASUS jest udzielana niezależnie, jako dodatek do wymaganej ustawowo gwarancji prawnej i w żaden sposób nie wpływa na prawa przysługujące na mocy gwarancji prawnej ani ich nie ogranicza.

Wszelkie informacje na temat gwarancji można znaleźć na stronie <https://www.asus.com/pl/support/>.

RO: Informații despre garanția ASUS

- ASUS oferă o garanție comercială voluntară a producătorului.
- ASUS își rezervă dreptul de a interpreta prevederile garanției comerciale ASUS.
- Această garanție comercială ASUS este oferită independent și în plus față de garanția obligatorie legală și nu afectează sau limitează în niciun fel drepturile acordate conform garanției legale.

Pentru toate informațiile legate de garanție, vizitați <https://www.asus.com/ro/support/>.

S: Información de garantía de ASUS

- ASUS ofrece una garantía comercial voluntaria del fabricante.
- ASUS se reserva el derecho de interpretar las disposiciones de esta garantía comercial de ASUS.
- Esta garantía comercial de ASUS se proporciona de forma independiente y adicional a la garantía estatutaria y de ninguna manera afecta a los derechos bajo la garantía legal ni los limita.

Para obtener toda la información sobre la garantía, visite <https://www.asus.com/ES/support/>.

SB: Informacje o ASUS gwarancji

- ASUS nudi dobrowolnu proizvođačku komercijalnu gwaranciju.
- ASUS zadržava pravo da tumači odredbe svoje ASUS komercijalne gwarancije.
- Ova ASUS komercijalna gwarancija daje se nezavisno, kao dodatak zakonskoj pravnoj gwaranciji, i ni ka koji način ne utiče na i ne ograničava prava data pravnom gwarancijom.

Za sve informacije o gwaranciji, posetite <https://www.asus.com/support/>.

SK: Informácie o záruke ASUS

- ASUS ponúka dobrovoľnú obchodnú záruku výrobcu.
- ASUS si vyhradzuje právo interpretovať ustanovenia obchodnej záruky ASUS.
- Táto obchodná záruka ASUS je poskytnutá nezávisle a navyše k zákonnej záruke a v žiadnom prípade neovplyvňuje ani neobmedzuje tieto práva podľa tejto zákonnej záruky.

Všetky ďalšie informácie o záruke nájdete na <https://www.asus.com/sk/support>.

SL: Informacije o garanciji ASUS

- ASUS ponuja prostovoljno tržno garancijo proizvajalca.
- ASUS si pridržuje pravico do razlage določb tržne garancije družbe ASUS.
- Ta tržna garancija družbe ASUS je na voljo neodvisno in kot dodatek zakonsko predpisani pravni garanciji ter na noben način ne vpliva na pravice, ki jih zagotavlja pravna garancija, oziroma jih omejuje.

Vse informacije o garanciji najdete na spletnem mestu <https://www.asus.com/support>.

SW: ASUS garantiinformation

- ASUS erbjuder en frivillig kommersiell tillverkningsgaranti.
- ASUS förbehåller sig rätten att tolka bestämmelserna i ASUS kommersiella garanti.
- Denna kommersiella garanti från ASUS tillhandahålls separat och som tillägg till den lagstadgade garantin, och påverkar eller begränsar på intet sätt rättheterna under den lagstadgade garantin.

För all garantiinformation, besök <https://www.asus.com/se/support/>.

TR: ASUS Garanti Bilgileri

- ASUS, gönüllü olarak üretici Ticari Garantisini sunar.
- ASUS, ASUS Ticari Garantisinin hükümlerini yorumlama hakkını saklı tutar.
- Bu ASUS Ticari Garantisini, bağımsız olarak ve hukuki Yasal Garanti'ye ek olarak sağlanır ve hiçbir şekilde Yasal Garanti kapsamındaki hakları etkilemez veya sınırlandırmaz.

Tüm garanti bilgileri için lütfen <https://www.asus.com/tr/support> adresini ziyaret edin.

UA: Інформація про Гарантію ASUS

- ASUS пропонує добровільну Комерційну Гарантію виробника.
- ASUS застерігає за собою право тлумачити положення Комерційної Гарантії ASUS.
- Цю Комерційну Гарантію надано незалежно і на додаток до обов'язкової Законної Гарантії; вона об'єднує чиним не впливає на права за Законною Гарантією і не обмежує їх.

Всю інформацію про гарантію подано тут: <https://www.asus.com/ua/support/>.

Компанія ASUS не несе відповідальності за шкоду, заподіяну життя, здоров'ю чи майну користувача або інших осіб внаслідок використання несправного Виробу або такого Виробу, що не пройшов діагностику після закінчення терміну служби.

З метою перевірки технічного стану Виробу та визначення безпеки його подальшого використання після закінчення терміну служби користувачу необхідно припинити використання Виробу та передати його в авторизований сервісний центр компанії ASUS протягом одного місяця з моменту виявлення пошкодження та/або закінчення терміну служби Виробу.

BP: Informações de garantia ASUS

Esta garantía aplica-se ao período definido pela garantía legal (90 dias) mais o período de garantía comercial oferecido pela ASUS. Por exemplo: 12M significa 12 meses de garantía no total (3 meses de garantía legal mais 9 meses de garantía contratual). 24 meses significa 24 meses de garantía no total (3 meses de garantía legal mais 21 meses de garantía contratual) e 36 meses significa 36 meses de garantía no total (3 meses de garantía legal e 33 de garantía contratual) a contar da data da garantía declarada (Data de Início da Garantía).

Para todas as informações de garantía, visite <https://www.asus.com/br/support/>.

ID: Informasi Garansi ASUS

Garansi ini berlaku di negara tempat pembelian.

Periode Garansi tertera pada kemasan/kotak dari Produk dan Masa Garansi dimulai sejak tanggal pembelian Produk ASUS dengan kondisi baru.

Silahkan pindai Kode di bagian bawah halaman terakhir untuk Kartu Garansi versi Web dalam format PDF untuk lebih informasi jelas mengenai jaminan garansi Produk ASUS.

- Informasi Dukungan ASUS, silakan kunjungi <https://www.asus.com/id/support>.
- Informasi Lokasi Layanan, silakan kunjungi <https://www.asus.com/id/support/Service-Center/Indonesia>.
- Layanan Call Center: 1500128

VN: Thông tin đảm bảo của ASUS

- ASUS cung cấp Bảo hành thương mại tự nguyện của nhà sản xuất.
- ASUS bảo lưu quyền giải thích các điều khoản của Bảo hành thương mại của ASUS.
- Bảo hành thương mại này của ASUS được cung cấp độc lập và ngoài Bảo đảm pháp lý theo luật định và không có cách nào ảnh hưởng đến hoặc giới hạn các quyền theo Bảo lãnh pháp lý. Để biết tất cả các thông tin bảo hành, vui lòng truy cập

<https://www.asus.com/vn/support>

ASUS מידע על אחריות :HB

- ASUS מציעה אחריות מסחרית של יצרן מוצר.
- ASUS שומרת לעצמה את הזכות לפרש את הוראות הערבות המסחרית של ASUS
- אחריות מסחרית זו של ASUS ניתנת באופן עצמאי ובנוסף לערבות המשפטית הסטטוטורית ואינה משפיעה או מבילה בשום אופן את הזכויות במסגרת הערבות המשפטית.

למידע אודות אחריות, אנא בקר ב
<https://www.asus.com/support>



Warranty Card (Online)

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Service and Support

Visit our multi-language website at <https://www.asus.com/support>.



Product Register

Log in and register your device for better product support.

