



Mini PC PN61 Series

User Manual



E17625

Revised Edition V3

November 2020

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About this manual

This manual provides information about the hardware and software features of your Mini PC, organized through the following chapters:

Chapter 1: Getting to know your Mini PC

This chapter details the hardware components of your Mini PC.

Chapter 2: Using your Mini PC

This chapter provides you with information on using your Mini PC.

Chapter 3: Upgrading your Mini PC

This chapter provides you with information on how to upgrade the memory modules, wireless modules, and hard disk drive / solid state drive of your Mini PC.

Appendix

This section includes notices and safety statements your Mini PC.

Conventions used in this manual

To highlight key information in this manual, some text are presented as follows:

IMPORTANT! This message contains vital information that must be followed to complete a task.

NOTE: This message contains additional information and tips that can help complete tasks.

WARNING! This message contains important information that must be followed to keep you safe while performing certain tasks and prevent damage to your Mini PC's data and components.

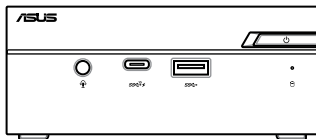
Typography

Bold text Indicates a menu or an item to select.

Italic This indicates sections that you can refer to in this manual.

Package contents

Your Mini PC package contains the following items:



ASUS Mini PC PN61 Series



AC power adapter*



Power cord*



Technical documentations

NOTE:

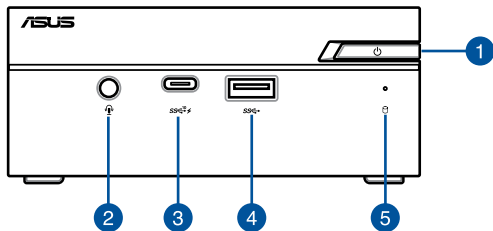
- *The bundled power adapter may vary by model and territories.
 - Some bundled accessories may vary with different models. For details on these accessories, refer to their respective user manuals.
 - The device illustration is for reference only. Actual product specifications may vary with models.
 - If the device or its components fail or malfunction during normal and proper use within the warranty period, bring the warranty card to the ASUS Service Center for replacement of the defective components.
-

1

***Getting to know your Mini
PC***

Features

Front view



1



Power button

The power button allows you to turn the Mini PC on or off. You can use the power button to put your Mini PC to sleep mode or press it for four (4) seconds to force shutdown your Mini PC.

2



Headphone/Headset/Microphone jack

This port allows you to connect amplified speakers or headphones. You can also use this port to connect your headset or an external microphone.

3



USB 3.1 Gen 2 Type-C™ port

This USB Type-C™ (Universal Serial Bus) port provides a transfer rate of up to 10 Gbit/s. This port also supports the Battery Charging 1.2 technology that allows you to charge your USB devices.

NOTE: Battery Charging 1.2 technology is only available on selected models, and provides a maximum of 5V / 1.5A output.

4

**USB 3.1 Gen 1 port**

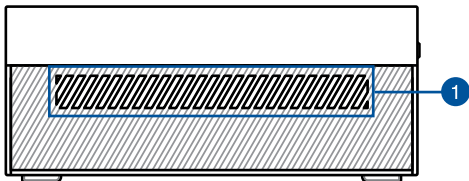
The USB 3.1 Gen 1 (Universal Serial Bus) port provides a transfer rate up to 5 Gbit/s.

5

Drive activity indicator

This indicator lights up when your Mini PC is accessing the internal storage drive.

Left view



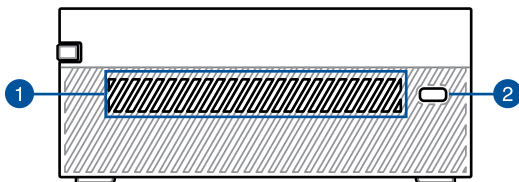
1

Air vents (intake vent)

The air vents allow cooler air to enter your Mini PC chassis.

IMPORTANT: For an optimum heat dissipation and air ventilation, ensure that the air vents are free from obstructions.

Right view



1

Air vents (intake vent)

The air vents allow cooler air to enter your Mini PC chassis.

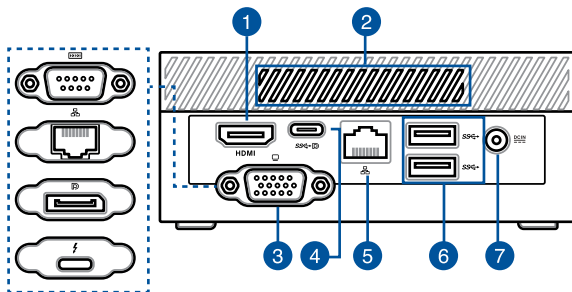
IMPORTANT: For an optimum heat dissipation and air ventilation, ensure that the air vents are free from obstructions.

2

Kensington security slot

The Kensington security slot allows you to secure your Mini PC using Kensington® security products.

Rear view



1 HDMI **HDMI port**

The HDMI (High Definition Multimedia Interface) port supports a Full-HD device such as an LCD TV or monitor to allow viewing on a larger external display.

NOTE: This port supports up to HDCP 2.0.

2 **Air vents (exhaust vent)**

The air vents allow your Mini PC chassis to expel hot air out.

IMPORTANT: For an optimum heat dissipation and air ventilation, ensure that the air vents are free from obstructions.

Configurable port

This port varies between models and consists of the following port options:



VGA port

This port allows you to connect your Mini PC to an external display.



Serial (COM) connector

The 9-pin serial (COM) connector allows you to connect devices that have serial ports such as mouse, modem, or printers.



LAN port

The 8-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.



DisplayPort

This port allows you to connect your Mini PC to an external display.



Thunderbolt 3 port

This Thunderbolt 3 port provides the following:
40 Gbit/s transfer rate for Thunderbolt 3 devices;
USB 3.1 Gen 2, with a transfer rate up to 10 Gbit/s;
DisplayPort 1.2; and USB power delivery with a maximum of 5V / 3A output.

4



USB 3.1 Gen 1 Type-C™/DisplayPort combo port

This USB Type-C™ (Universal Serial Bus) port provides a transfer rate of up to 5 Gbit/s, and supports Display port 1.2. Use a USB Type-C™ adapter to connect your Mini PC to an external display.

5



LAN port

The 8-pin RJ-45 LAN port supports a standard Ethernet cable for connection to a local network.

6



USB 3.1 Gen 1 port

The USB 3.1 Gen 1 (Universal Serial Bus) port provides a transfer rate up to 5 Gbit/s.

7



Power input

The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the Mini PC. To prevent damage to the Mini PC, always use the supplied power adapter.

WARNING! The power adapter may become warm to hot when in use. Do not cover the adapter and keep it away from your body.

2

Using your Mini PC

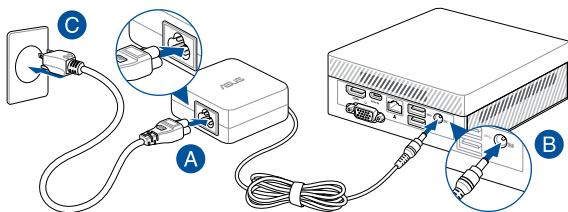
Getting started

Connect the AC power adapter to your Mini PC

To connect the AC power adapter to your Mini PC:

- Connect the power cord to the AC power adapter.
- Connect the DC power connector into your Mini PC's power (DC) input.
- Plug the AC power adapter into a 100V~240V power source.

NOTE: The power adapter may vary in appearance, depending on models and your region.



IMPORTANT!

- We strongly recommend that you use only the AC power adapter and cable that came with your Mini PC.
 - We strongly recommend that you use a grounded wall socket while using your Mini PC.
 - The socket outlet must be easily accessible and near your Mini PC.
 - To disconnect your Mini PC from its main power supply, unplug your Mini PC from the power socket.
-

NOTE:

The power adapter may vary between models and territories, please refer to the following for more information on the different adapters:

90W Power adapter

- Input voltage: 100-240 Vac
- Input frequency: 50-60 Hz
- Rating output current: 4.74 A (90 W)
- Rating output voltage: 19 V

65W Power adapter

- Input voltage: 100-240 Vac
 - Input frequency: 50-60 Hz
 - Rating output current: 3.42 A (65 W)
 - Rating output voltage: 19 V
-

Connect a display panel to your Mini PC

You can connect a display panel or projector to your Mini PC that has the following connectors:

- HDMI connector
- VGA connector
- DisplayPort
- Thunderbolt 3 port

NOTE:

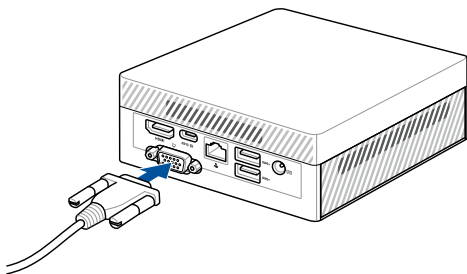
- Up to two display panels may be connected simultaneously when using the USB3.1 Gen 1 Type-C™/DisplayPort combo port and the configurable port*, or USB3.1 Gen 1 Type-C™/DisplayPort combo port and HDMI port.
- When using the HDMI port, the Configurable port* will be disabled, and vice versa.
- Ensure your device is powered off when switching between the HDMI port and the Configurable port*.

* This port may vary per model. Please refer to the Features section for the location of the ports.

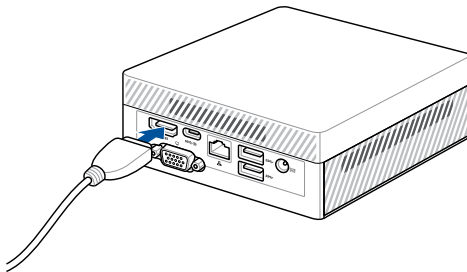
To connect a display panel to your Mini PC:

Connect one end of an HDMI, VGA, DisplayPort, or a Thunderbolt 3 cable to an external display, and the other end of the cable to your Mini PC's HDMI port, VGA port, DisplayPort, or Thunderbolt 3 port.

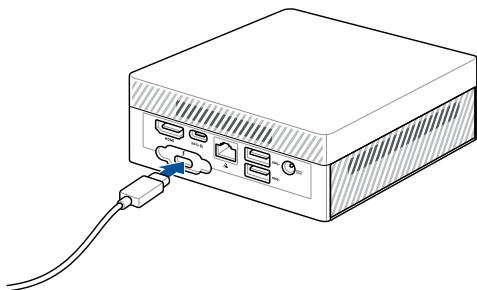
Connect display via VGA port



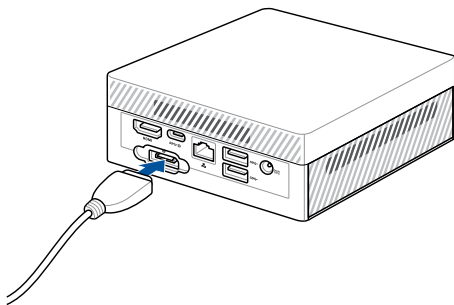
Connect display via HDMI port



Connect display via Thunderbolt 3 port



Connect display via DisplayPort



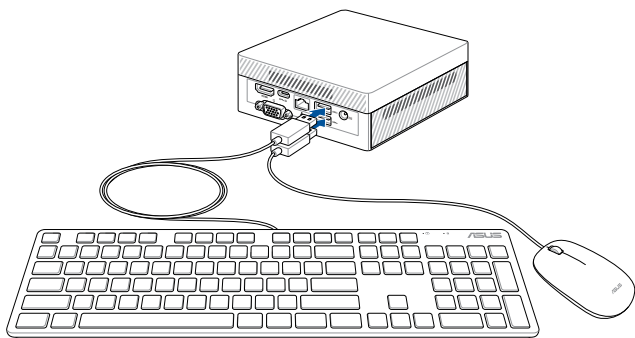
Connect the USB cable from keyboard or mouse

You can connect generally any USB keyboard and mouse to your Mini PC. You can also connect a USB dongle for a wireless keyboard and mouse set.

To connect a keyboard and mouse to your Mini PC:

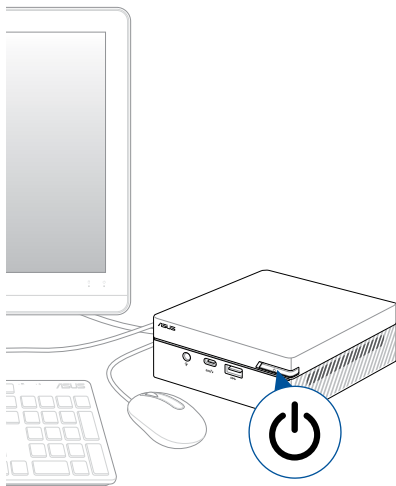
Connect the USB cable from your keyboard and mouse to any of the USB ports of your Mini PC.

NOTE: The keyboard varies with country or region.



Turn on your Mini PC

Press the power button to turn on your Mini PC.



Turning your Mini PC off

If your Mini PC is unresponsive, press and hold the power button for at least four (4) seconds until your Mini PC turns off.

Putting your Mini PC to sleep

To put your Mini PC on Sleep mode, press the Power button once.

Entering the BIOS Setup

BIOS (Basic Input and Output System) stores system hardware settings that are needed for system startup in the Mini PC.

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.

WARNING! 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.

Load default BIOS settings

To load the default values for each of the parameters in your BIOS:

- Enter the BIOS by pressing <F2> or on the POST screen.

NOTE: POST (Power-On Self Test) is a series of software controlled diagnostic tests that run when you turn on your Mini PC.

- Navigate to the **Exit** menu.
- Select the **Load Optimized Defaults** option, or you may press <F5>.
- Select **OK** to load the default BIOS values.

3

Upgrading your Mini PC

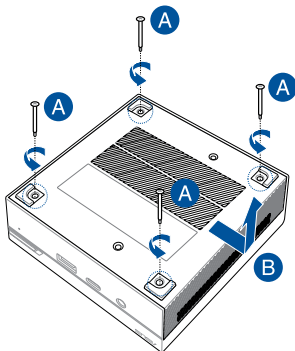
IMPORTANT!

- It is recommended that you install or upgrade the memory modules, wireless card, and solid state drive (SSD), under professional supervision. Visit an ASUS service center for further assistance.
 - Ensure that your hands are dry before proceeding with the rest of the installation process. Before installing any of the features in this guide, use a grounded wrist strap or touch a safely grounded object or metal object to avoid damaging them due to static electricity.
-

NOTE: The illustrations in this section are for reference only. The slots may vary depending on model.

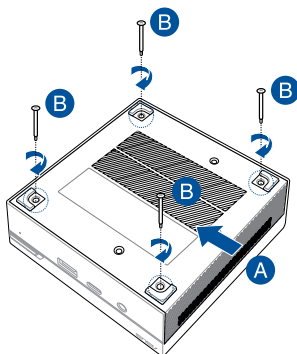
Removing the bottom cover

1. Turn off your Mini PC then disconnect all cables and peripherals.
2. Place the Mini PC on a flat stable surface, with its top side facing down.
3. Remove the four (4) screws from the bottom cover (A), then push the bottom cover towards the right to remove the bottom cover (B).



Replacing the bottom cover

Push the bottom cover from the right side towards the left side of the Mini PC (A), then secure it using the four (4) screws removed previously (B).

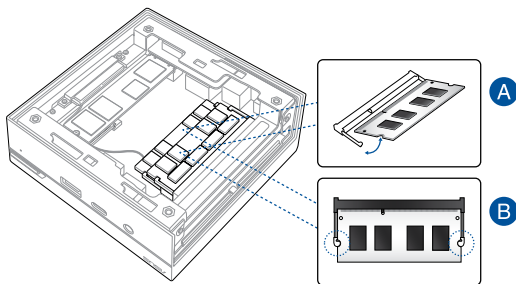


Installing memory modules

Your Mini PC comes with two SO-DIMM memory slots that allow you to install two DDR4 SO-DIMMs.

IMPORTANT! Refer to <http://www.asus.com> for the list of compatible DIMMs. You can only install DDR4 SO-DIMMs to the Mini PC's DIMM slots.

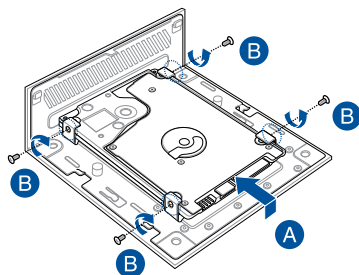
1. Align and insert the memory module into the slot (A) and press it down (B) until it is securely seated in place. Repeat the same steps to install the other memory module.



Installing 2.5" HDD or SSD

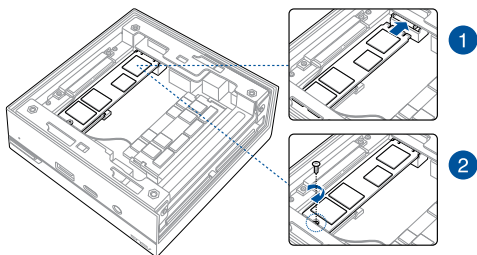
1. Prepare your 2.5" HDD or SSD, then align it with the storage bay on the bottom cover of your Mini PC.
2. Insert your HDD or SSD into the storage bay (A), then secure it with four (4) screws (B).

IMPORTANT! This device only supports 7mm and 9.5mm 2.5" HDD or SSD.



Installing the M.2 SSD (on selected models)

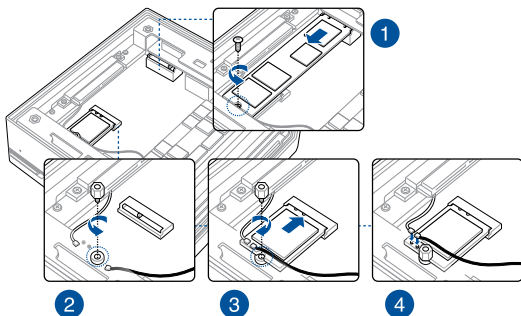
1. Align and insert the 2280 M.2 SSD into its slot inside the Mini PC.
2. Gently push down the 2280 M.2 SSD on top of the screw hole and fasten it using one of the bundled 3mm round screws.



Installing the wireless card

NOTE: Your Mini PC includes a M.2 slot for 2230 wireless and Bluetooth modules. Refer to <http://www.asus.com> for the list of compatible wireless and Bluetooth modules.

1. (optional) Remove the M.2 SSD if an M.2 SSD is installed. To remove the M.2 SSD, remove the screw from the screw hole, then remove the M.2 SSD.
2. Remove the M.2 stand screw.
3. Align and insert the wireless card into its slot inside the Mini PC, then gently push down the wireless card on top of the screw hole and fasten it using the previously removed stand screw.
4. (optional) Connect the antennas to your wireless card.



NOTE:

- Connecting antennas to your wireless card may strengthen the wireless signal.
 - A soft clicking sound indicates that the antenna has been securely attached on the wireless card.
-

Appendix

Safety information

Your Mini PC is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

Setting up your system

- Read and follow all instructions in the documentation before you operate your system.
- Do not use this product near water or a heated source.
- Set up the system on a stable surface.
- Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- Use this product in environments with ambient temperatures between 0°C and 35°C.
- If you use an extension cord, make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.
- This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

Care during use

- Do not walk on the power cord or allow anything to rest on it.
- Do not spill water or any other liquids on your system.
- When the system is turned off, a small amount of electrical current still flows. Always unplug the power cord from the power outlets before cleaning the system.

- If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
 - The power cord or plug is damaged.
 - Liquid has been spilled into the system.
 - The system does not function properly even if you follow the operating instructions.
 - The system was dropped or the cabinet is damaged.
 - The system performance changes.

Lithium-Ion Battery Warning

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

NO DISASSEMBLY

The warranty does not apply to the products that have been disassembled by users



DO NOT throw the Mini PC 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, electronic equipment, and mercury-containing button cell battery) should not be placed in municipal waste. Check local technical support services for product recycling.

Regulatory notices

REACH

Complying with the REACH (Registration, Evaluation, Authorization, and Restriction of Chemicals) regulatory framework, we publish the chemical substances in our products at ASUS REACH website at <http://csr.asus.com/english/REACH.htm>

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 <http://csr.asus.com/english/Takeback.htm> for the detailed recycling information in different regions.

COATING NOTICE

IMPORTANT! To provide electrical insulation and maintain electrical safety, a coating is applied to insulate the device except on the areas where the I/O ports are located.

RF exposure warning

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- 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 manufacturer's 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 to 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.

IMPORTANT! Outdoor operations in the 5.15~5.25 GHz band is prohibited. This device has no Ad-hoc capability for 5250~5350 and 5470~5725 MHz.

CAUTION! Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

ISED Radiation Exposure Statement for Canada

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. To maintain compliance with ISED RF exposure compliance requirements, please avoid direct contact to the transmitting antenna during transmitting. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Operation is subject to the following two conditions:

- This device may not cause interference and
- This device must accept any interference, including interference that may cause undesired operation of the device.

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-3(B)/NMB-3(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-3(B)/NMB-3(B)

Wireless Operation Channel for Different Domains

N. America	2.412-2.462 GHz	Ch01 through CH11
Japan	2.412-2.484 GHz	Ch01 through Ch14
Europe ETSI	2.412-2.472 GHz	Ch01 through Ch13

Regional notice for Singapore

Complies with
IMDA Standards
DB103778

This ASUS product complies with IMDA Standards.

Regional notice for California



WARNING

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

Regional notice for Malaysia



HDMI Compliance Statement

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

ENERGY STAR complied product

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices.



All ASUS products with the ENERGY STAR logo comply with the ENERGY STAR standard, and the power management feature is enabled by default. The monitor and computer are automatically set to sleep after 10 and 30 minutes of user inactivity. To

wake your computer, click the mouse or press any key on the keyboard.

Please visit <http://www.energystar.gov/powermanagement> for detail information on power management and its benefits to the environment. In addition, please visit <http://www.energystar.gov> for detail information on the ENERGY STAR joint program.

NOTE: Energy Star is NOT supported on FreeDOS and Linux-based products.

Manufacturer	ASUSTeK Computer Inc.	
	Tel:	+886-2-2894-3447
	Address:	1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan
Authorised representative in Europe	ASUSTeK Computer GmbH	
	Address:	Harkortstrasse 21-23, 40880 Ratingen, Germany

ASUS contact information

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Online support <https://qr.asus.com/techserv>

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Fax +1-510-608-4555
Web site <https://www.asus.com/us/>

Technical Support

Support fax +1-812-284-0883
Telephone +1-812-282-2787
Online support <https://qr.asus.com/techserv>

ASUS COMPUTER GmbH (Germany and Austria)

Address Harkortstrasse 21-23, 40880 Ratingen, Germany
Web site <https://www.asus.com/de>
Online contact <https://www.asus.com/support/Product/ContactUs/Services/questionform/?lang=de-de>

Technical Support

Telephone (DE) +49-2102-5789557
Telephone (AT) +43-1360-2775461
Online support <https://www.asus.com/de/support>

Call center: <https://www.asus.com/support/CallUs>

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.