Cubi Series

Personal Computer

Cubi NUC 1M
Cubi NUC 1MG
Cubi NUC 13MQ
Cubi NUC 13MQG
(Cubi B0B1)

User Guide

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Revision
V1.2, 2024/11

Getting Started

This chapter provides you with the information on hardware setup procedures. While connecting devices, be careful in holding the devices and use a grounded wrist strap to avoid static electricity.

Package Contents

Personal Computer	Cubi B0B1
Documentation	Quick Start Guide (Optional)
	User Guide (Optional)
	Warranty Book (Optional)
Accessories	Power Cord
	External Power Supply
	Power Button Switch Cable (Optional)
	VESA Plate (Optional)
	VESA Mount Screws (Optional)

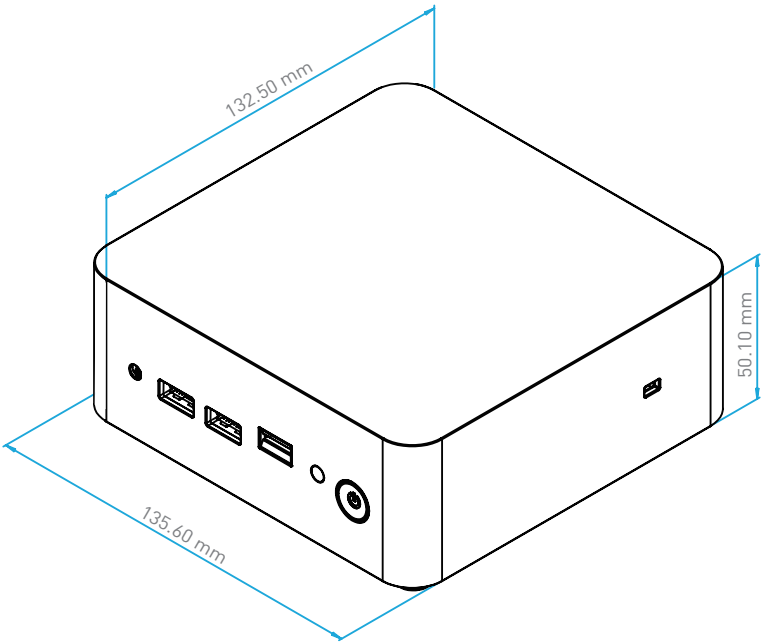
Important

- *Contact your place of purchase or local distributor if any of the items is damaged or missing.*
- *Package contents may vary by country and model.*
- *The included power cord is exclusively for this personal computer and should not be used with other products.*

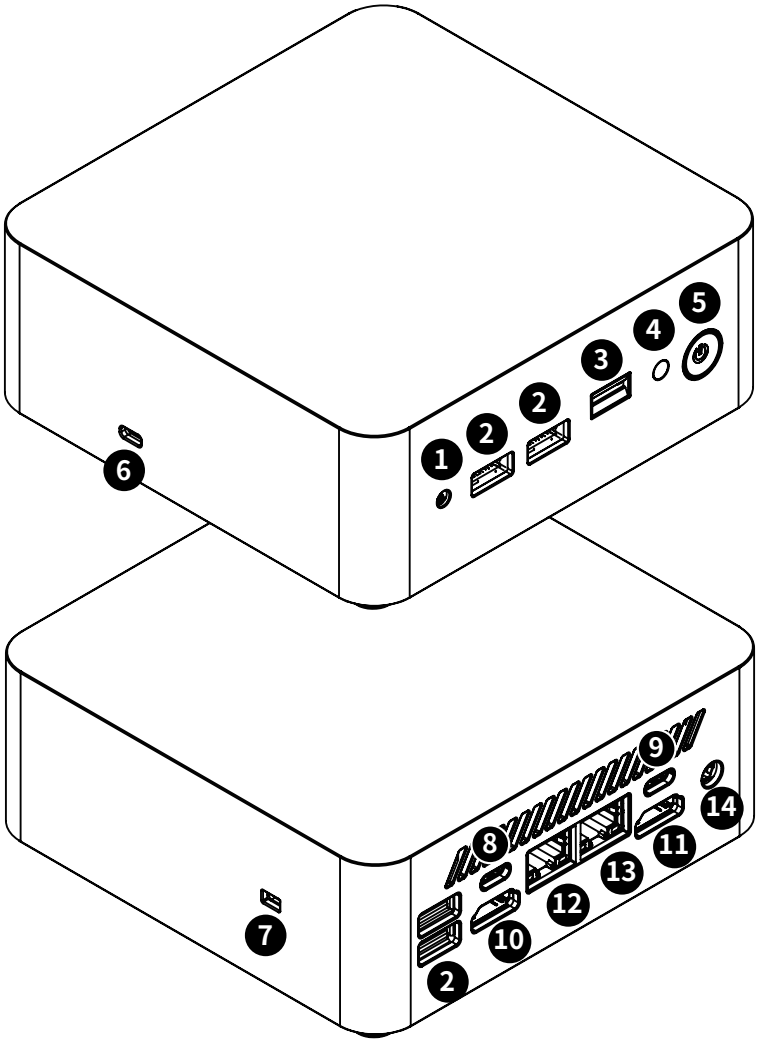
Safety & Comfort Tips

- Choosing a good workspace is important if you have to work with your PC for a long period of time.
- Your work area should have enough illumination.
- Choose the proper desk and chair and adjust their height to fit your posture when operating.
- When sitting on the chair, sit straight and keep a good posture. Adjust the chair' s back (if available) to support your back comfortably.
- Place you feet flat and naturally on the floor, so that your knees and elbows have the proper position (about 90-degree) when operating.
- Put your hands on the desk naturally to support your wrists.
- Avoid using your PC in a place where discomfort may occur (such as on the bed).
- The PC is an electrical device. Please treat it with great care to avoid personal injury.

System Dimension



System Overview



1	**Combo Audio Jack** This connector is provided for headphones or speakers or microphones.
2	**USB 3.2 Gen 2 Port** This connector is provided for USB peripheral devices. (Speed up to 10 Gbps)
3	**MicroSD Card Reader** For MicroSD cards.
4	**Hard Disk Drive LED** This indicator shows the activity status of the HDD. It flashes when the system is accessing data on the HDD and remains off when no disk activity is detected.
5	**Power Button & Power LED** Press the power button to turn the system on and off. The power LED glows when the system is turned on and goes off when the system is shut down. In terms of power saving, the LED blinks in Modern Standby (S0 Low Power Idle) or S3 (Suspend to RAM) mode and goes off in S4 (Suspend to Disk) mode.
6	**Kensington Lock Port** This PC provides a Kensington lock port, which allows users to secure the PC in place with a key or some mechanical PIN device and attached through a rubberized metal cable. The end of the cable has a small loop which allows the whole cable to be looped around a permanent object, such as a heavy table or other similar equipment, thus securing the PC in place.
7	**Power Button Switch Cable Connector (optional)** With a power button switch cable, you can power on/ off the device easier. Remove the cover from the connector and connect the power button switch cable to this connector.
8	**Thunderbolt™ 4 Port (USB Type-C®)** • Supports up to 40Gbps transfer rate with Thunderbolt™ devices. • Supports up to 20Gbps transfer rate with USB4™ devices. • Supports up to 10Gbps transfer rate with USB 3.2 devices. • Supports up to 5V/3A,15W power charging. • Each port can daisy-chain up to three Thunderbolt™ 4 devices or five Thunderbolt™ 3 devices. • Graphics cards are the only source from which Thunderbolt™ 4 port receives video signals. • Supports up to 8K display.

9 **Thunderbolt™ 4 Port (USB Type-C®)**

- Supports up to 40Gbps transfer rate with Thunderbolt™ devices.
- Supports up to 20Gbps transfer rate with USB4™ devices.
- Supports up to 10Gbps transfer rate with USB 3.2 devices.
- Supports up to 5V/3A,15W power charging.
- Supports USB-PD Sink up to 100W DC (20V/5A).
- Each port can daisy-chain up to three Thunderbolt™ 4 devices or five Thunderbolt™ 3 devices.
- Graphics cards are the only source from which Thunderbolt™ 4 port receives video signals.
- Supports up to 8K display.

10 **HDMI™ Connector**

Supports 4K@60Hz as specified in HDMI™ 2.1.

Important

Graphics specifications may vary depending on the installed CPU.

11 **HDMI™ Connector**

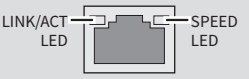
- Supports 4K@60Hz as specified in HDMI™ 2.1.
- Supports power on/off via MSI Power Link.

Important

Graphics specifications may vary depending on the installed CPU.

12 **2.5 Gbps LAN Jack**

The standard RJ-45 LAN jack is provided for connection to the Local Area Network (LAN). You can connect a network cable to it.



LED	Status	Description
Link/ Activity LED	Off	No link
	Yellow	Linked
	Blinking	Data activity
Speed LED	Off	10 Mbps
	Green	100/1000 Mbps
	Orange	2.5 Gbps

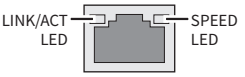
Important

Cubi NUC 13MQ/13MQG supports Intel® vPro® technology.

13

2.5 Gbps LAN Jack

The standard RJ-45 LAN jack is provided for connection to the Local Area Network (LAN). You can connect a network cable to it.



LED	Status	Description
Link/ Activity LED	Off	No link
	Yellow	Linked
	Blinking	Data activity
Speed LED	Off	10 Mbps
	Green	100/1000 Mbps
	Orange	2.5 Gbps

14

Power Jack

Power supplied through this jack supplies power to your system.

Hardware Setup

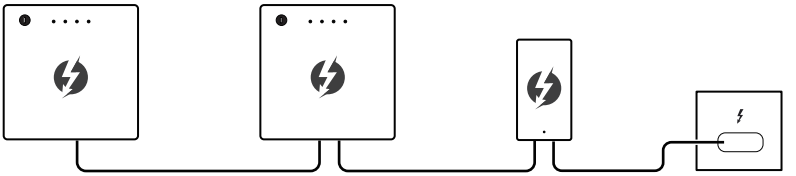
Connect your peripheral devices to suitable ports.

Important

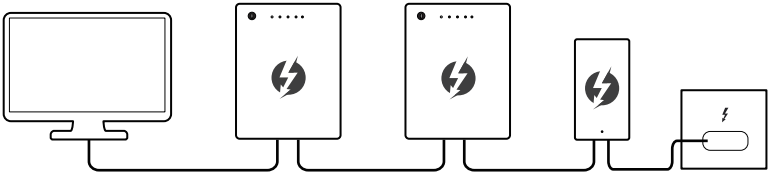
- *For detailed instructions on how to connect, please refer to the manuals of your peripheral devices.*
- *Reference image only. Appearance will vary.*

Connecting Thunderbolt Devices via Daisy-chain (Optional)

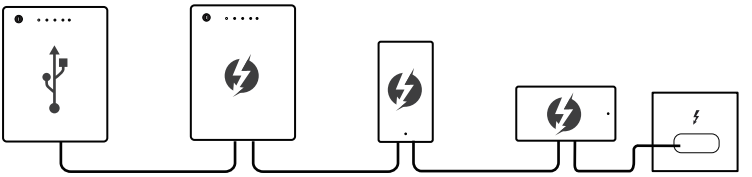
Daisy-chain is a method of connecting multiple devices to a PC with only one output terminal. Daisy-chain allows you to connect multiple Thunderbolt devices to a single Thunderbolt port on the front IO panel.



You can also daisy-chain monitors on the front IO panel. Please note that monitors should be the last devices on the chain.

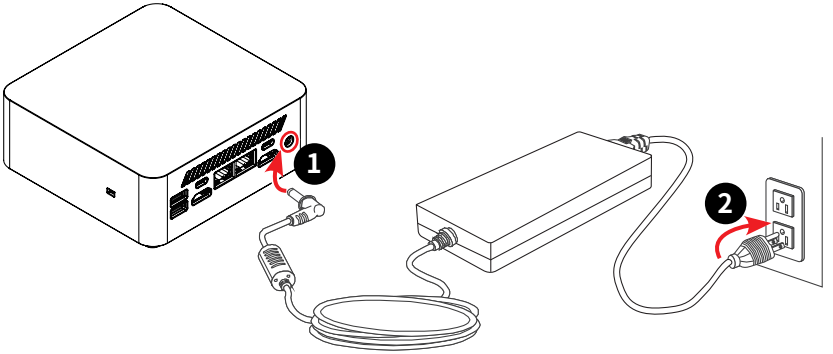


If you want to connect USB devices, please place them at the end of the chain.



Connect the power cord to the system and electrical outlet.

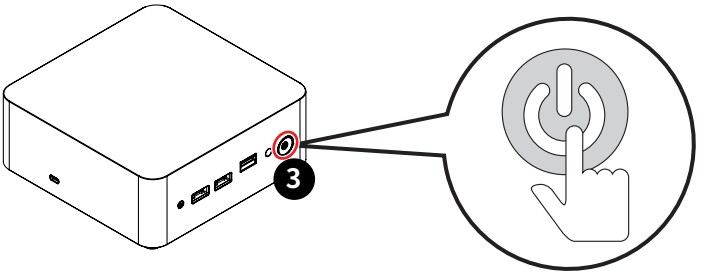
- External Power Supply: 120W, 19.5V
  - Input: 100~240Vac, 50/60Hz
  - Output: 19.5V ⎓ 6.15A



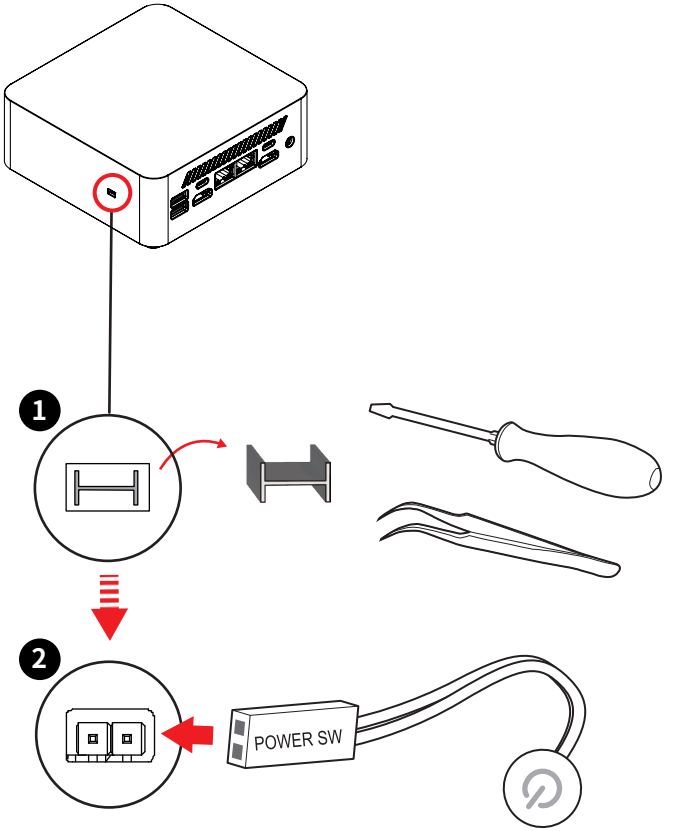
Important

When unplugging the AC power cord, always hold the connector part of the cord. Never pull the cord directly.

Press the power button to power on the system.

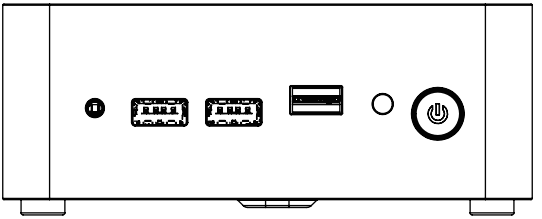


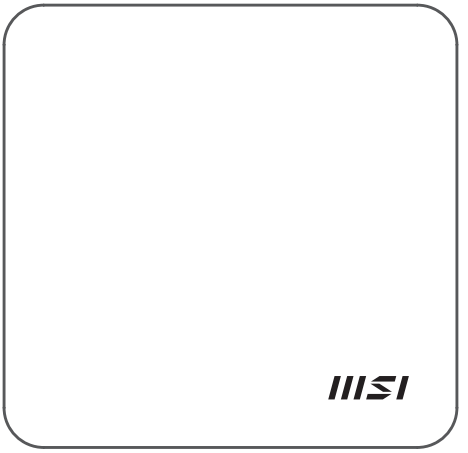
Connect the power button switch cable. (Optional)



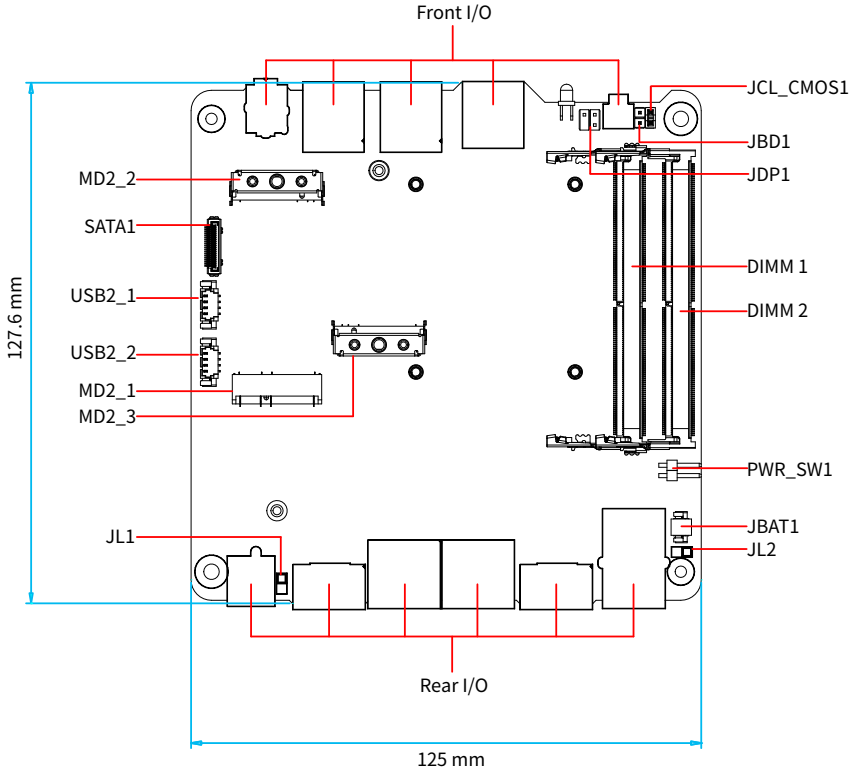
Placing the System

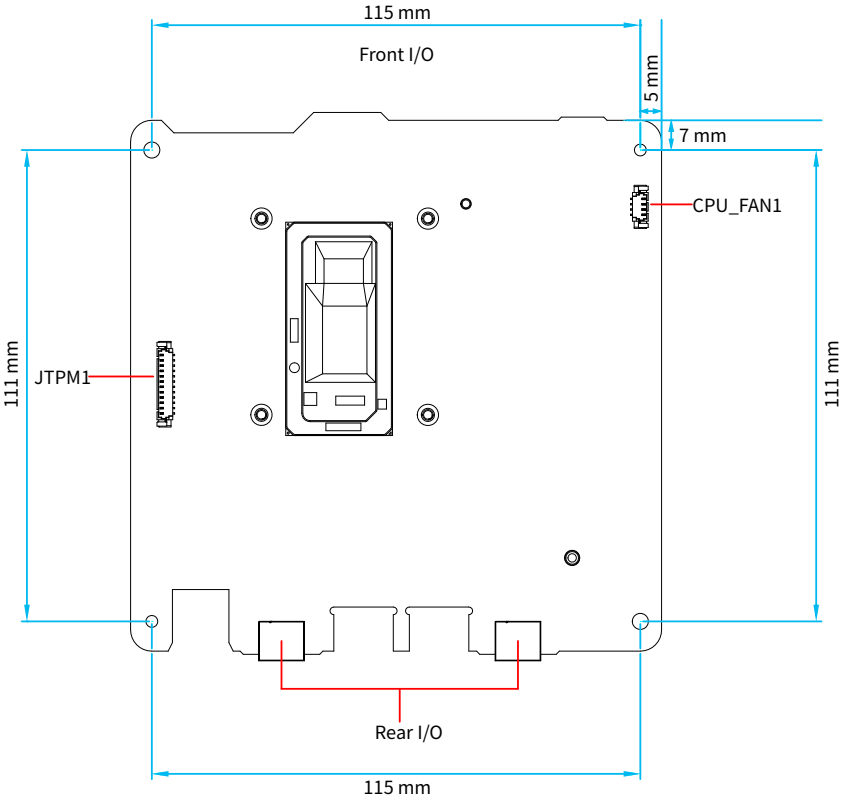
Users can place the system horizontally or wall mount it.



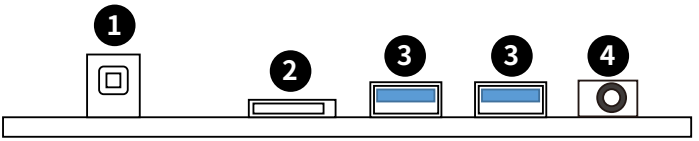


Mainboard Components

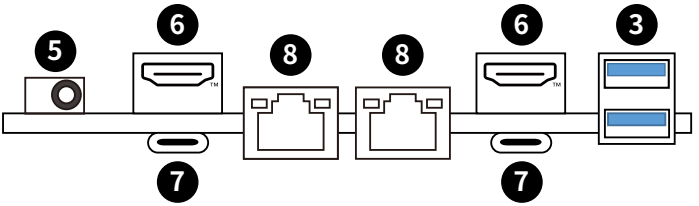



115 mm
Front I/O
5 mm
7 mm
CPU_FAN1
111 mm
JTPM1
111 mm
Rear I/O
115 mm

Front I/O Connectors



Rear I/O Connectors



1. Power Button
2. MicroSD Card Reader
3. USB 3.2 Gen 2 Port
4. Combo Audio Jack
5. Power Jack
6. HDMI™ Connector
7. Thunderbolt™ 4 Port (USB-C®)
8. 2.5 Gbps LAN Jack

Internal Headers & Connectors

JCL_CMOS1: Clear CMOS jumper

Pin	Signal	Pin	Signal
1	RTCRST#	2	GND

PWR_SW1: Power switch header

Pin	Signal	Pin	Signal
1	PWRBTIN#	2	GND

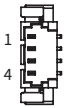
JDP1: Debug header

Pin	Signal	Pin	Signal
1	SIO_DEBUG	3	GND
2	VCC5	4	NC

JBD1: BIOS debug header

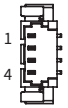
Pin	Signal	Pin	Signal
1	GND	2	SOUTA

USB2_1: USB2.0 header



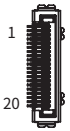
Pin	Signal	Pin	Signal
1	SVCC2	3	USBP8
2	USBN8	4	GND

USB2_2: USB2.0 header



Pin	Signal	Pin	Signal
1	SVCC2	3	USBP9
2	USBN9	4	GND

SATA1: SATA connector

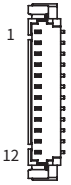


Pin	Signal	Pin	Signal
1	GND	11	NC
2	SATA_TXP_0	12	VCC5
3	SATA_TXN_0	13	VCC5
4	GND	14	VCC5
5	GND	15	VCC5
6	SATA_RXN_0	16	VCC5
7	SATA_RXP_0	17	NC
8	GND	18	GND
9	GND	19	GND
10	GND	20	GND

CPU_FAN1: CPU FAN connector

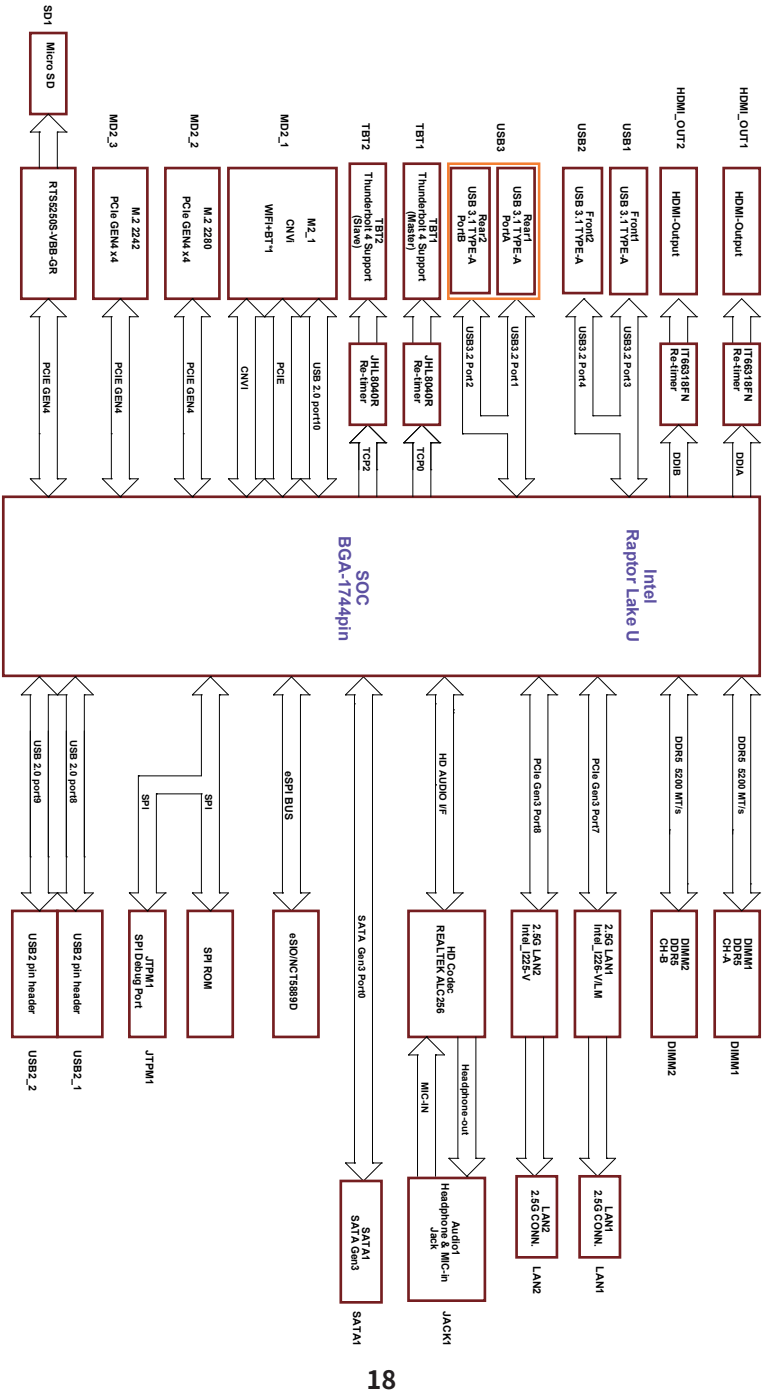
Pin	Signal	Pin	Signal
1	GND	3	SIO_CPU_FANTAC
2	VCC5	4	SIO_CPU_FAN

JTPM1: TPM module connector



Pin	Signal	Pin	Signal
1	3VSB	7	GND
2	PCH_SPI_CS2#	8	EC_PLTRST_TPM#
3	PCH_SPI_MISO	9	SPI_SW_SEL
4	PCH_SPI_MOSI	10	NC
5	PCH_SPI_CS#	11	PCH_SPI_IO2
6	PCH_SPI_CLK	12	SERIRQ

Block Diagram



Windows 11 System Operations

Important

All information and Windows screenshots are subject to change without prior notice.

Power Management

Power management of personal computers (PCs) and monitors has the potential to save significant amounts of electricity as well as deliver environmental benefits.

To be energy efficient, turn off your display or set your PC to sleep mode after a period of user inactivity.

1. Right-click [Start] and select [Power Options] from the list.
2. Adjust [Screen and sleep] settings and select a power mode from the list.
3. To choose or customize a power plan, type control panel in the search box and select [Control Panel].
4. Open up [All Control Panel Items] window. Select [Large icons] under [View by] drop-down menu.
5. Select [Power Options] to continue.
6. Select a power plan and fine-tune the settings by clicking [Change plan settings].
7. To create your own power plan, select (Create a power plan).
8. Select an existing plan and give it a new name.
9. Adjust settings for your new power plan.
10. The [Shut down or sign out] menu also presents power saving options for rapid and easy management of your system power.

Energy Savings

The power management feature allows the computer to initiate a low-power or "Sleep" mode after a period of user inactivity. To take advantage of these potential energy savings, the power management feature has been preset to behave in the following ways when the system is operating on AC power:

- Turn off the display after 10 minutes
- Initiate Sleep after 30 minutes

Waking the System Up

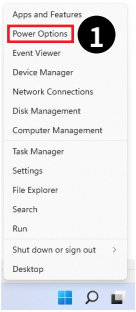
The computer shall be able to wake up from power saving mode in response to a command from any of the following:

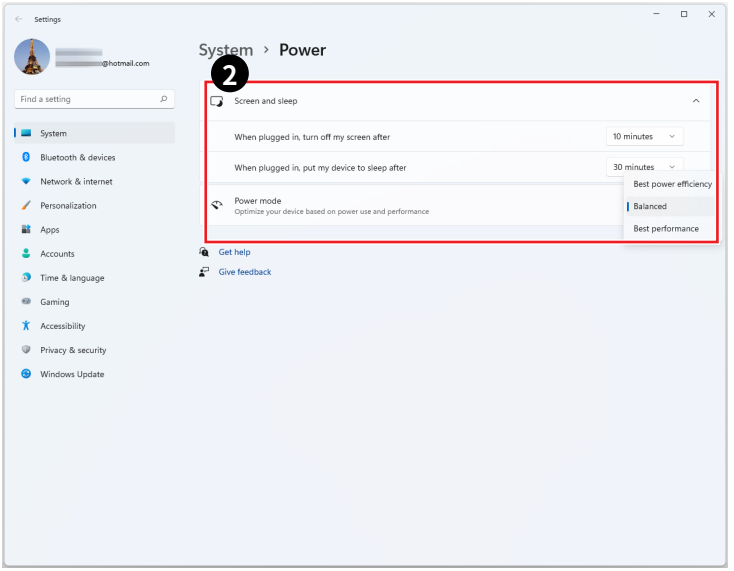
- the power button,
- the network (Wake On LAN),
- the mouse,
- the keyboard.

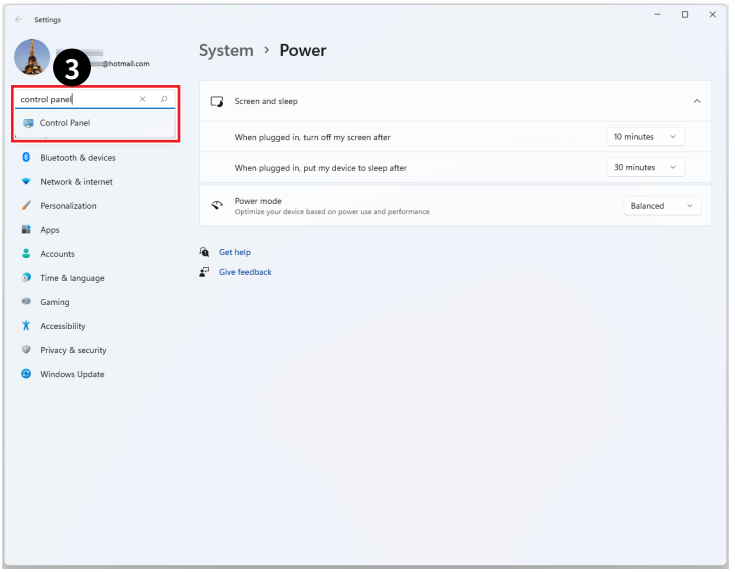
Energy Saving Tips:

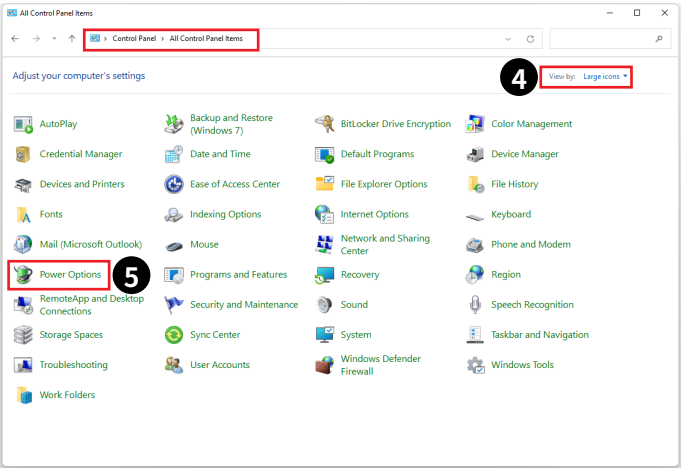
- Turn off the monitor by pressing the monitor power button after a period of user inactivity.

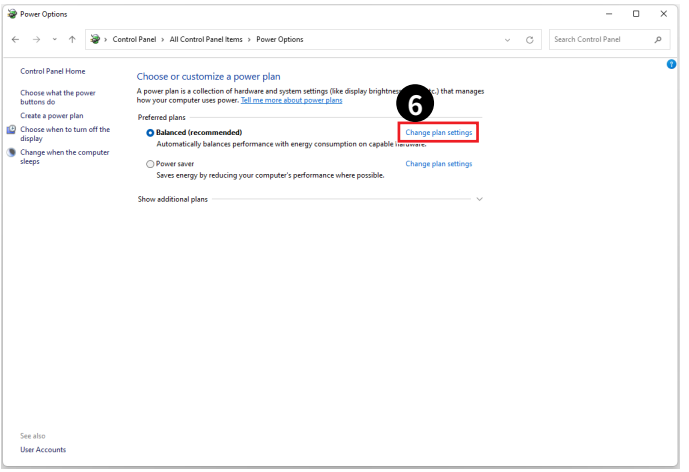
- Tune the settings in Power Options under Windows OS to optimize your PC’s power management.
- Install power saving software to manage your PC’s energy consumption.
- Always disconnect the AC power cord or switch the wall socket off if your PC would be left unused for a certain time to achieve zero energy consumption.

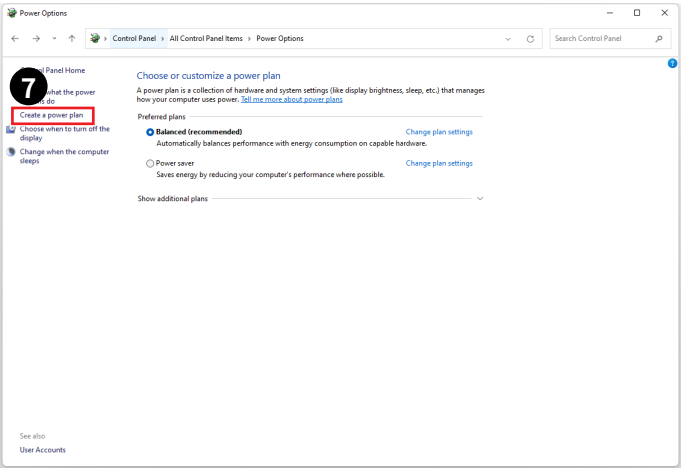


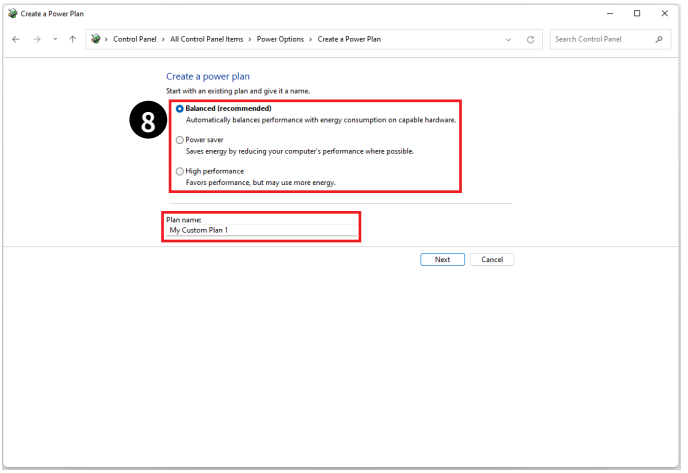


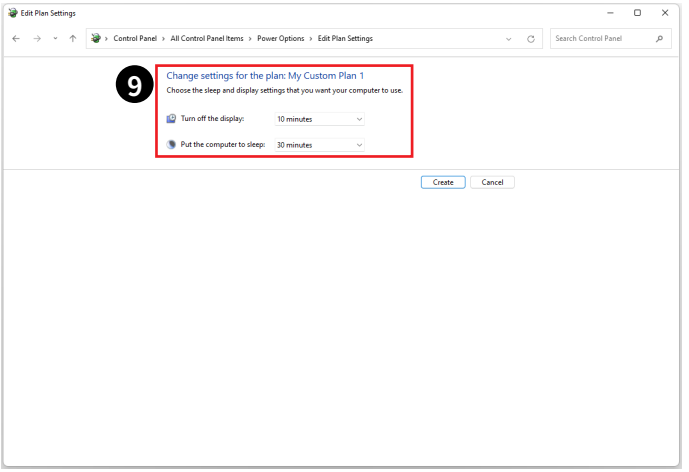


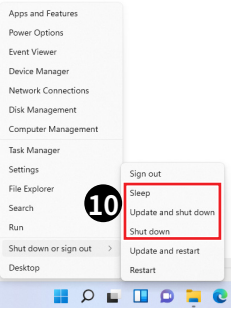

All Control Panel Items
Control Panel › All Control Panel Items
Adjust your computer's settings
View by: Large icons
4
AutoPlay
Backup and Restore (Windows 7)
BitLocker Drive Encryption
Color Management
Credential Manager
Date and Time
Default Programs
Device Manager
Devices and Printers
Ease of Access Center
File Explorer Options
File History
Fonts
Indexing Options
Internet Options
Keyboard
Mail (Microsoft Outlook)
Mouse
Network and Sharing Center
Phone and Modem
Power Options
5
Programs and Features
Recovery
Region
RemoteApp and Desktop Connections
Security and Maintenance
Sound
Speech Recognition
Storage Spaces
Sync Center
System
Taskbar and Navigation
Troubleshooting
User Accounts
Windows Defender Firewall
Windows Tools
Work Folders


Power Options
Control Panel › All Control Panel Items › Power Options
Search Control Panel
Control Panel Home
Choose what the power buttons do
Create a power plan
Choose when to turn off the display
Change when the computer sleeps
Choose or customize a power plan
A power plan is a collection of hardware and system settings (like display brightness, sleep, etc.) that manages how your computer uses power. Tell me more about power plans
6
Preferred plans
Balanced (recommended)
Automatically balances performance with energy consumption on capable hardware.
Change plan settings
Power saver
Saves energy by reducing your computer's performance where possible.
Change plan settings
Show additional plans
See also
User Accounts


Power Options
Control Panel › All Control Panel Items › Power Options
Search Control Panel
7
Create a power plan
Choose when to turn off the display
Change when the computer sleeps
Choose or customize a power plan
A power plan is a collection of hardware and system settings (like display brightness, sleep, etc.) that manages how your computer uses power. Tell me more about power plans
Preferred plans
Balanced (recommended)
Automatically balances performance with energy consumption on capable hardware.
Change plan settings
Power saver
Saves energy by reducing your computer's performance where possible.
Change plan settings
Show additional plans
See also
User Accounts


Create a Power Plan
Control Panel › All Control Panel Items › Power Options › Create a Power Plan
Search Control Panel
Create a power plan
Start with an existing plan and give it a name.
8
Balanced (recommended)
Automatically balances performance with energy consumption on capable hardware.
Power saver
Saves energy by reducing your computer's performance where possible.
High performance
Favors performance, but may use more energy.
Plan name:
My Custom Plan 1
Next
Cancel

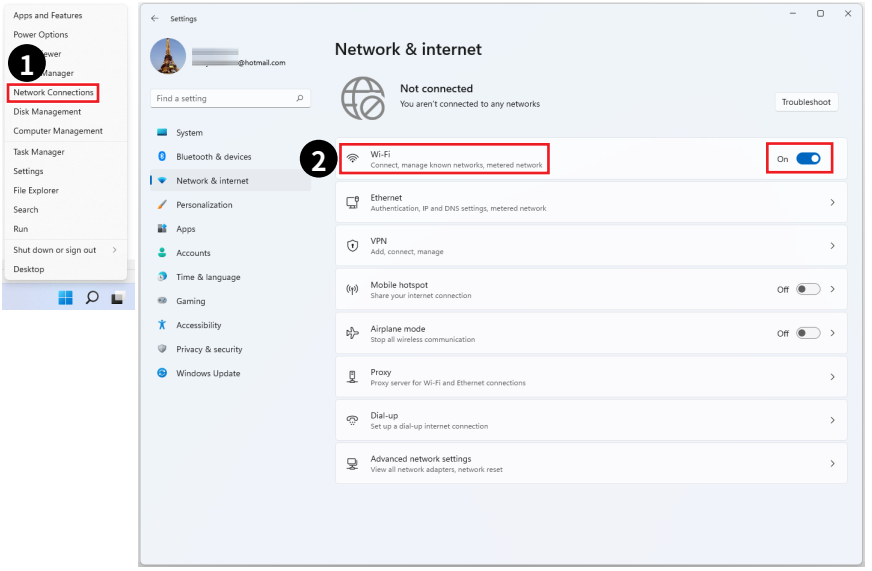

Edit Plan Settings
Control Panel › All Control Panel Items › Power Options › Edit Plan Settings
Search Control Panel
9
Change settings for the plan: My Custom Plan 1
Choose the sleep and display settings that you want your computer to use.
Turn off the display:
10 minutes
Put the computer to sleep:
30 minutes
Create
Cancel

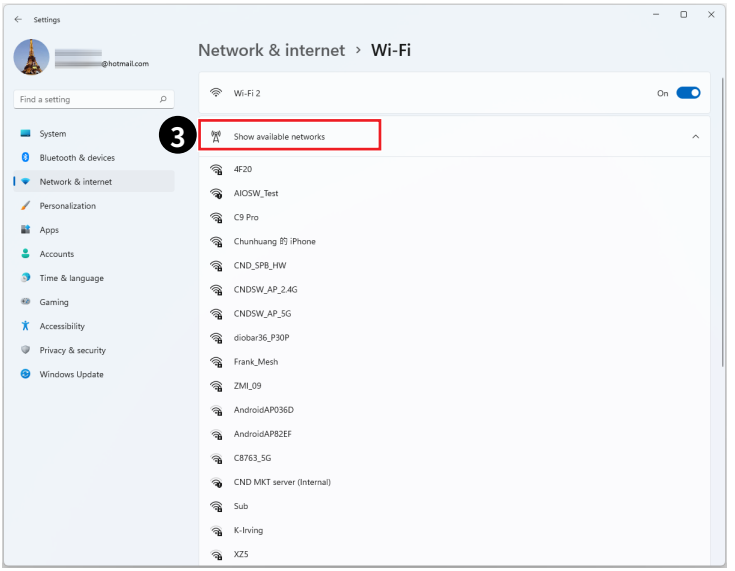

Apps and Features
Power Options
Event Viewer
Device Manager
Network Connections
Disk Management
Computer Management
Task Manager
Settings
File Explorer
Search
Run
Shut down or sign out
Desktop
10
Sign out
Sleep
Update and shut down
Shut down
Update and restart
Restart

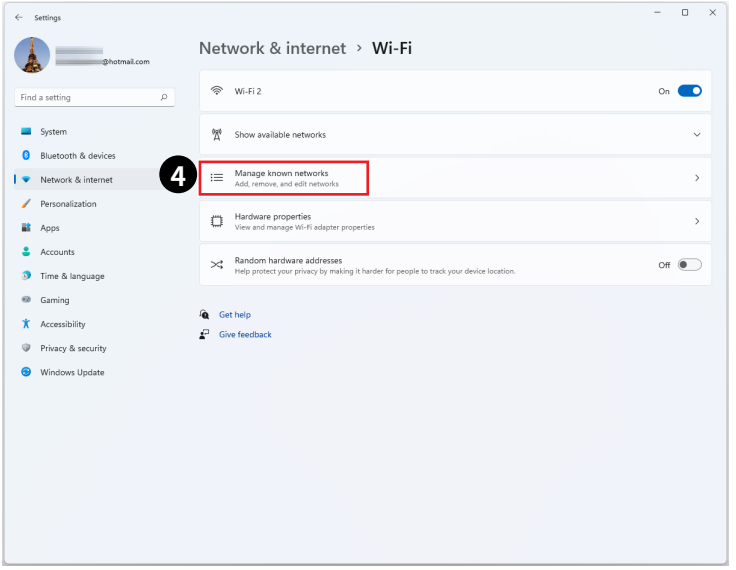
Network Connections

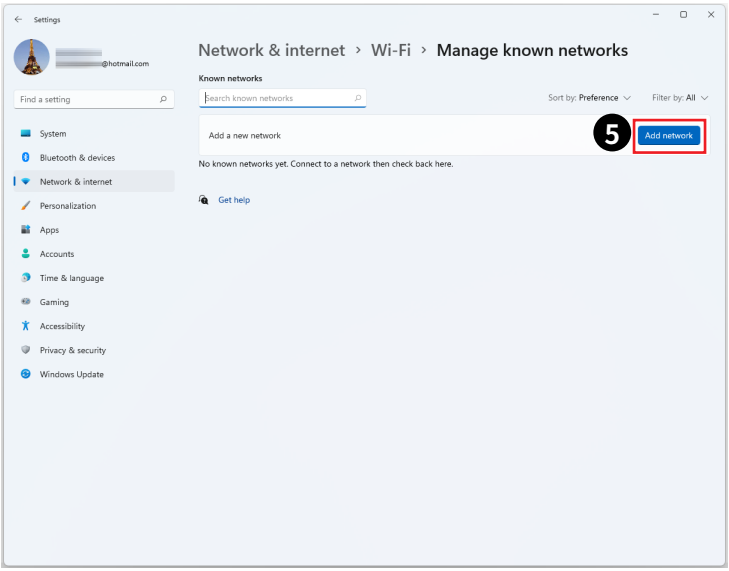
Wi-Fi

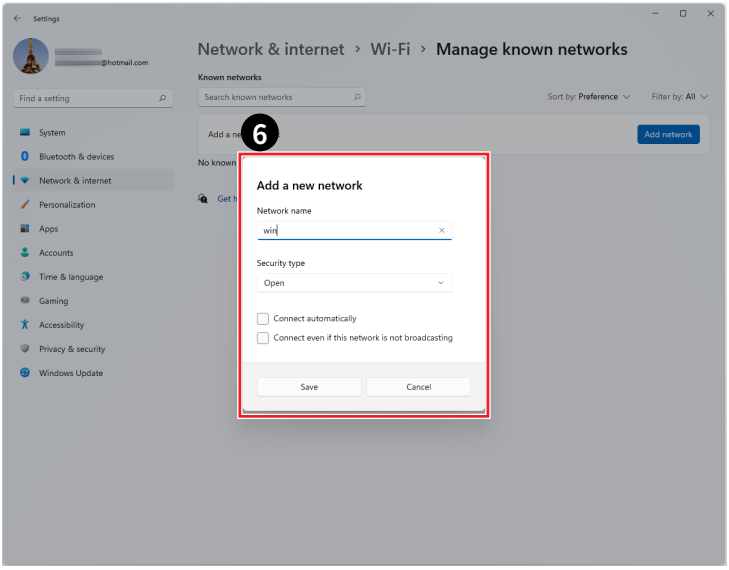
1. Right-click [Start] and select [Network Connections] from the list.
2. Select and turn on [Wi-Fi].
3. Select [Show available networks]. A list of available wireless networks pops up. Choose a connection from the list.
4. To establish a new connection, select [Manage known networks].
5. Select [Add network].
6. Enter information for the wireless network you intend to add and click [Save] to establish a new connection.




Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Network & internet › Wi-Fi
Wi-Fi 2
On
3
Show available networks
4F20
AIOSW_Test
C9 Pro
Chunhuang 的 iPhone
CND_SPB_HW
CNDSW_AP_2.4G
CNDSW_AP_5G
diobar36_P30P
Frank_Mesh
ZMI_09
AndroidAP036D
AndroidAP82EF
C8763_5G
CND MKT server (Internal)
Sub
K-Irving
XZ5

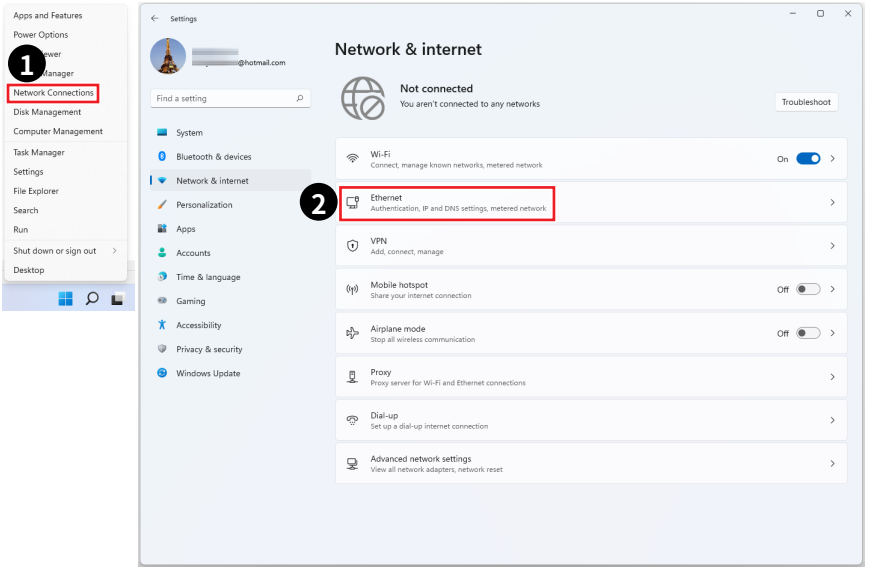

Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Network & internet › Wi-Fi
Wi-Fi 2
On
Show available networks
4
Manage known networks
Add, remove, and edit networks
Hardware properties
View and manage Wi-Fi adapter properties
Random hardware addresses
Help protect your privacy by making it harder for people to track your device location.
Off
Get help
Give feedback

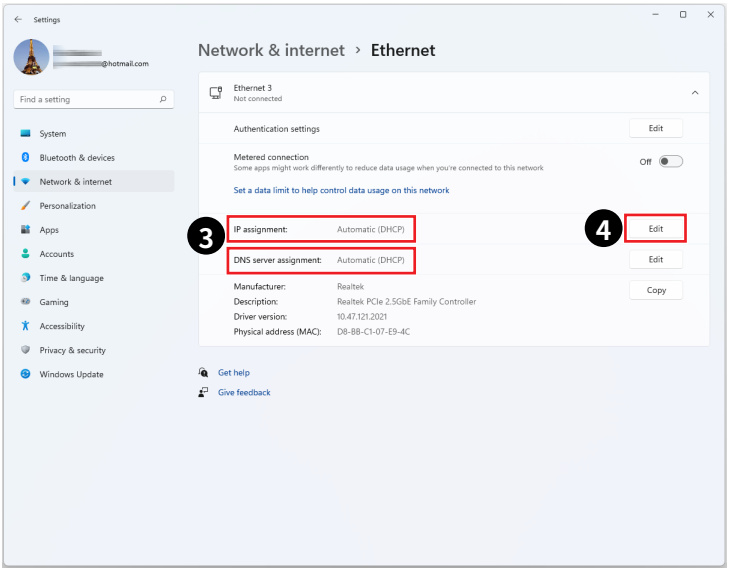

Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Network & internet › Wi-Fi › Manage known networks
Known networks
Search known networks
Sort by: Preference
Filter by: All
Add a new network
5
Add network
No known networks yet. Connect to a network then check back here.
Get help

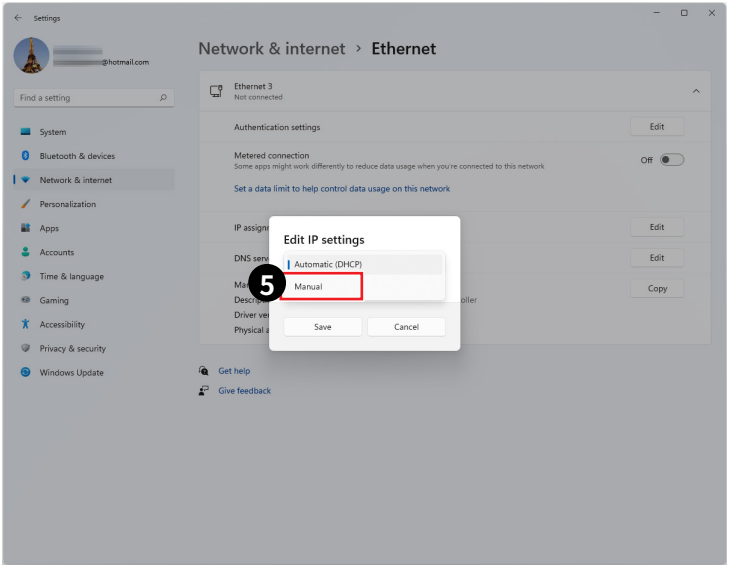

Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Network & internet › Wi-Fi › Manage known networks
Known networks
Search known networks
Sort by: Preference
Filter by: All
Add network
6
Add a new network
Network name
win
Security type
Open
Connect automatically
Connect even if this network is not broadcasting
Save
Cancel

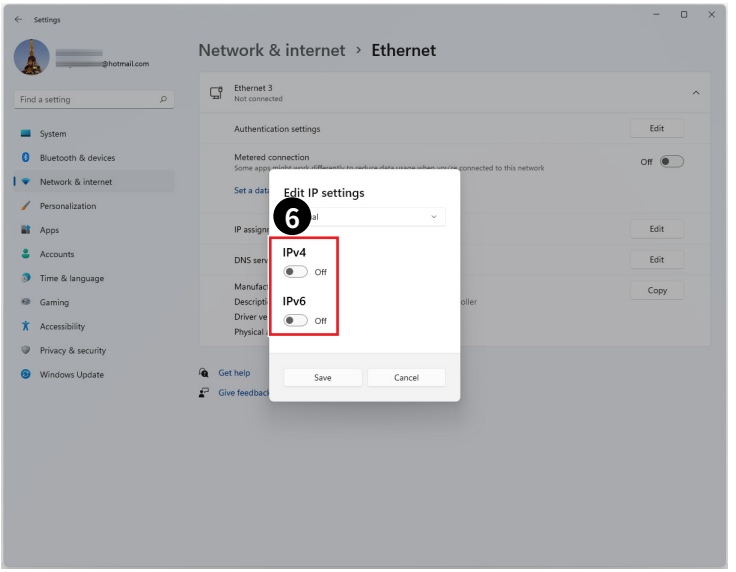
Ethernet

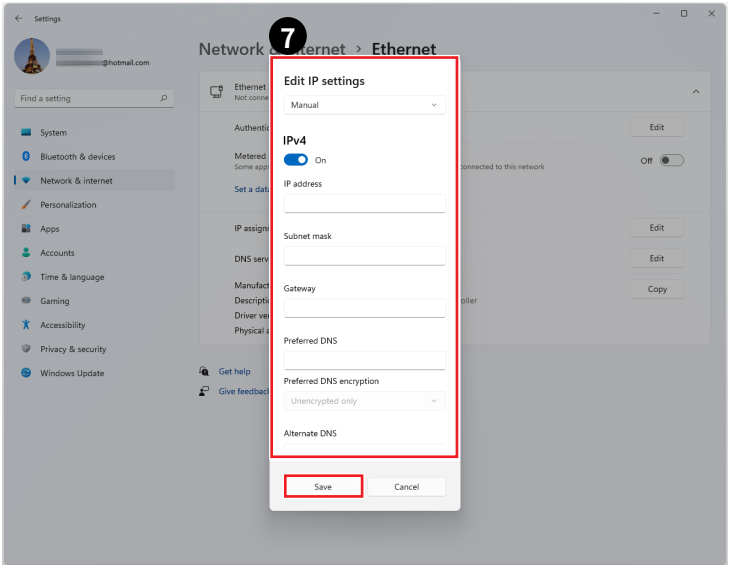
1. Right-click [Start] and select [Network Connections] from the list.
2. Select [Ethernet].
3. The [IP assignment] and [DNS server assignment] are automatically set as [Automatic (DHCP)].
4. For a Static IP connection, click [Edit] of [IP assignment].
5. Select [Manual].
6. Switch on the [IPv4] or [IPv6].
7. Type the information from your Internet Service Provider and click [Save] to establish a Static IP connection.




Settings
Network & internet › Ethernet
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Ethernet 3
Not connected
Authentication settings
Edit
Metered connection
Some apps might work differently to reduce data usage when you're connected to this network
Off
Set a data limit to help control data usage on this network
3
IP assignment: Automatic (DHCP)
4
Edit
DNS server assignment: Automatic (DHCP)
Edit
Manufacturer: Realtek
Description: Realtek PCIe 2.5GbE Family Controller
Driver version: 10.47.121.2021
Physical address (MAC): D8-BB-C1-07-E9-4C
Copy
Get help
Give feedback

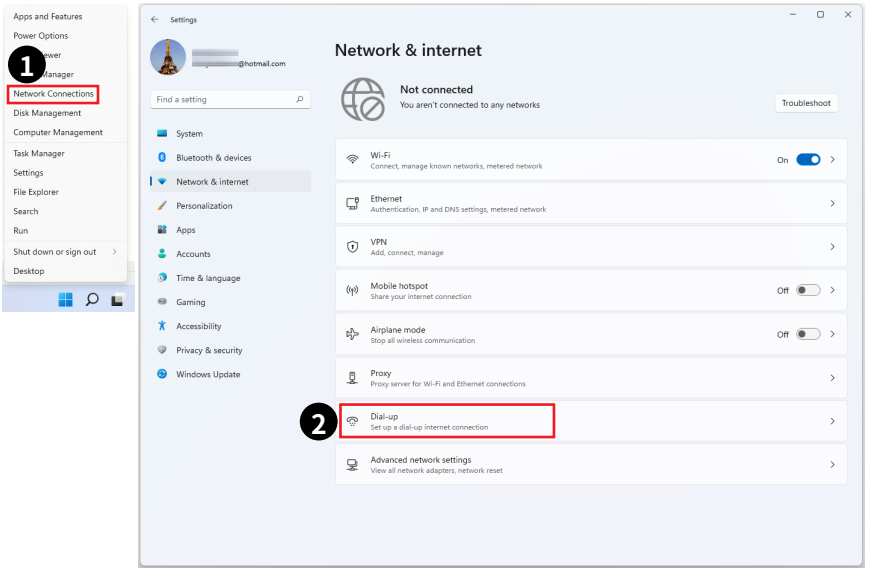

Settings
Network & internet › Ethernet
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Ethernet 3
Not connected
Authentication settings
Edit
Metered connection
Some apps might work differently to reduce data usage when you're connected to this network
Off
Set a data limit to help control data usage on this network
Edit IP settings
Automatic (DHCP)
5
Manual
Save
Cancel
Edit
Edit
Copy
Get help
Give feedback

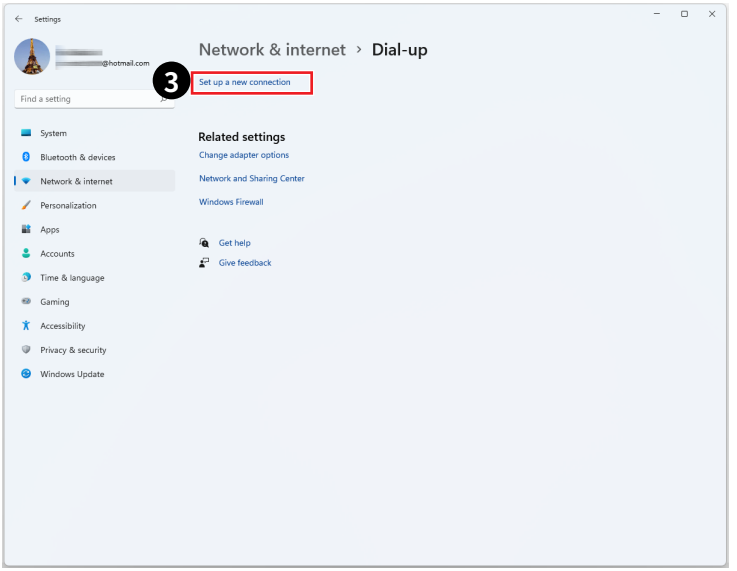

Settings
Network & internet › Ethernet
Edit IP settings
6
IPv4
Off
IPv6
Off
Save
Cancel

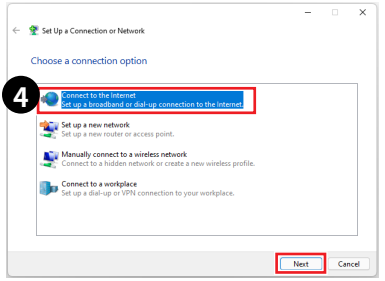

Settings
7
Edit IP settings
Manual
IPv4
On
IP address
Subnet mask
Gateway
Preferred DNS
Preferred DNS encryption
Unencrypted only
Alternate DNS
Save
Cancel

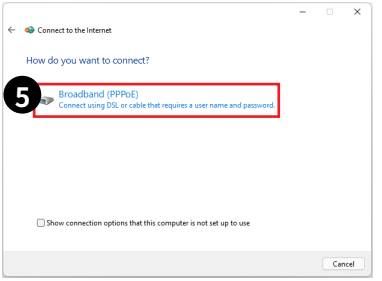
Dial-up

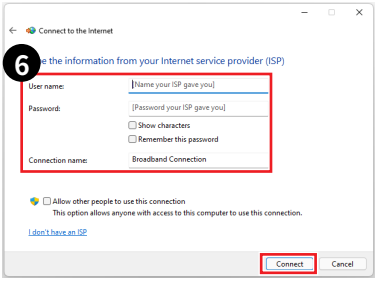
1. Right-click [Start] and select [Network Connections] from the list.
2. Select [Dial-up].
3. Select [Set up a new connection].
4. Choose [Connect to the Internet] and click [Next].
5. Select [Broadband (PPPoE)] to connect using DSL or cable that requires a user name and password.
6. Type the information from your Internet Service Provider (ISP) and click [Connect] to establish your LAN connection.




Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
Network & internet › Dial-up
3
Set up a new connection
Related settings
Change adapter options
Network and Sharing Center
Windows Firewall
Get help
Give feedback


Set Up a Connection or Network
Choose a connection option
4
Connect to the Internet
Set up a broadband or dial-up connection to the Internet.
Set up a new network
Set up a new router or access point.
Manually connect to a wireless network
Connect to a hidden network or create a new wireless profile.
Connect to a workplace
Set up a dial-up or VPN connection to your workplace.
Next
Cancel


Connect to the Internet
How do you want to connect?
5
Broadband (PPPoE)
Connect using DSL or cable that requires a user name and password.
Show connection options that this computer is not set up to use
Cancel


Connect to the Internet
6
e the information from your Internet service provider (ISP)
User name:
[Name your ISP gave you]
Password:
[Password your ISP gave you]
Show characters
Remember this password
Connection name:
Broadband Connection
Allow other people to use this connection
This option allows anyone with access to this computer to use this connection.
I don't have an ISP
Connect
Cancel

System Recovery

The purposes for using the System Recovery Function may include:

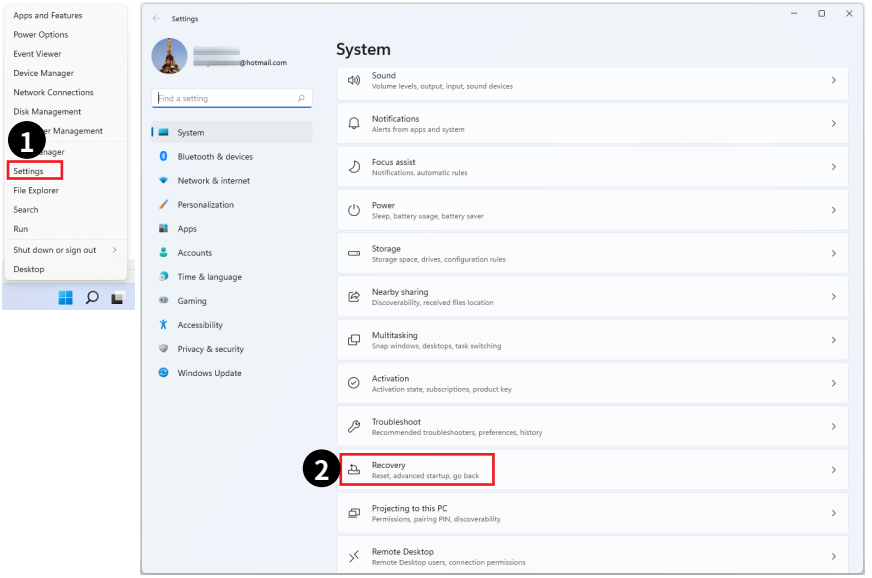
- Restore the system back to the initial status of original manufacturer' s default settings.
- When some errors have occurred to the operating system in use.
- When the operating system is affected by virus and is not able to work normally.
- When you want to install the OS with other built-in languages.

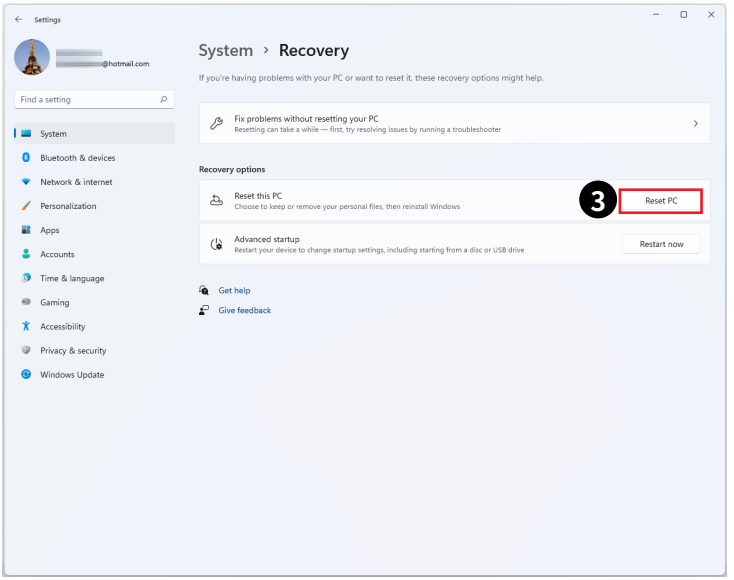
Before using the System Recovery Function, please back up the important data saved on your system drive to other storage devices.

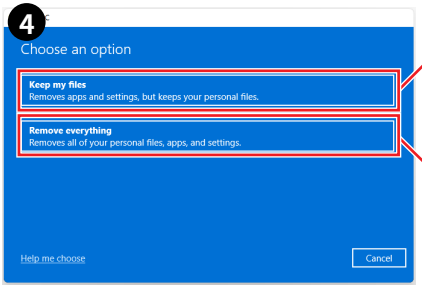
If the following solution fails to recover your system, please contact the authorized local distributor or service center for further assistance.

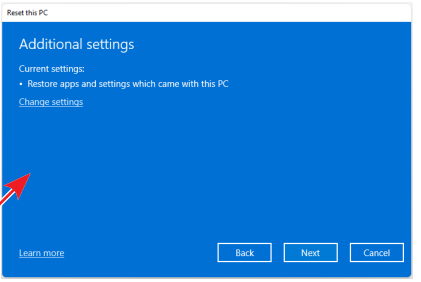
Reset this PC

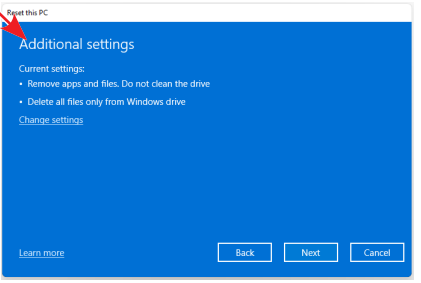
1. Right-click [Start] and select [Settings] from the list.
2. Select [Recovery] under [System].
3. Click [Reset PC] to start the system recovery.
4. The [Choose an option] screen pops up. Choose between [Keep my files] and [Remove everything] and follow the on-screen instructions to complete your system recovery.




Settings
@hotmail.com
Find a setting
System
Bluetooth & devices
Network & internet
Personalization
Apps
Accounts
Time & language
Gaming
Accessibility
Privacy & security
Windows Update
System › Recovery
If you're having problems with your PC or want to reset it, these recovery options might help.
Fix problems without resetting your PC
Resetting can take a while — first, try resolving issues by running a troubleshooter
Recovery options
Reset this PC
Choose to keep or remove your personal files, then reinstall Windows
3
Reset PC
Advanced startup
Restart your device to change startup settings, including starting from a disc or USB drive
Restart now
Get help
Give feedback


4
Choose an option
Keep my files
Removes apps and settings, but keeps your personal files.
Remove everything
Removes all of your personal files, apps, and settings.
Help me choose
Cancel


Reset this PC
Additional settings
Current settings:
• Restore apps and settings which came with this PC
Change settings
Learn more
Back
Next
Cancel


Reset this PC
Additional settings
Current settings:
• Remove apps and files. Do not clean the drive
• Delete all files only from Windows drive
Change settings
Learn more
Back
Next
Cancel

F3 Hotkey Recovery (Optional)

Precautions for Using the System Recovery Function

1. If your hard drive and system encountered non-recoverable problems, please use the F3 Hotkey recovery from the Hard Drive first to perform the System Recover Function.
2. Before using the System Recovery Function, please back up the important data saved on your system drive to other storage devices.

Recovering the system with the F3 Hotkey

Follow the instructions below to continue:

1. Restart the PC.
2. Press the F3 hotkey on the keyboard promptly when the MSI greeting appears on the display.
3. On the [Choose an option] screen, select [Troubleshoot].
4. On the [Troubleshoot] screen, select [Restore MSI factory settings] to reset the system to the default settings.
5. On the [RECOVERY SYSTEM] screen, select [System Partition Recovery].
6. Follow the on-screen instructions to continue and complete the Recovery Function.

Safety Instructions

- Read the safety instructions carefully and thoroughly.
- All cautions and warnings on the device or User Guide should be noted.
- Refer servicing to qualified personnel only.

Power

- Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the device to the power outlet.
- If the power cord comes with a 3-pin plug, do not disable the protective earth pin from the plug. The device must be connected to an earthed mains socket-outlet.
- Please confirm the power distribution system in the installation site shall provide the circuit breaker rated 120/240V, 20A (maximum).
- Always unplug the power cord before installing any add-on card or module to the device.
- Always disconnect the power cord or switch the wall socket off if the device would be left unused for a certain time to achieve zero energy consumption.
- Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.
- If this device comes with an adapter, use only the MSI provided AC adapter approved for use with this device.

Battery

Please take special precautions if this device comes with a battery.

- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
- Avoid disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, which can result in an explosion.
- Avoid leaving a battery in an extremely high temperature or extremely low air pressure environment that can result in an explosion or the leakage of flammable liquid or gas.
- Do not ingest battery. If the coin/button cell battery is swallowed, it can cause severe internal burns and can lead to death. Keep new and used batteries away from children.

European Union:

Batteries, battery packs, and accumulators should not be disposed of as unsorted household waste. Please use the public collection system to return, recycle, or treat them in compliance with the local regulations.

BSMI:

廢電池請回收
For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

California, USA:

The button cell battery may contain perchlorate material and requires special handling when recycled or disposed of in California.
For further information please visit: https://dtsc.ca.gov/perchlorate/

Environment

- To reduce the possibility of heat-related injuries or of overheating the device, do not place the device on a soft, unsteady surface or obstruct its air ventilators.
- Use this device only on a hard, flat and steady surface.
- To prevent fire or shock hazard, keep this device away from humidity and high temperature.
- Do not leave the device in an unconditioned environment with a storage temperature above 60°C or below 0°C, which may damage the device.
- The maximum operating temperature is around 35°C.
- When cleaning the device, be sure to remove the power plug. Use a piece of soft cloth rather than industrial chemical to clean the device. Never pour any liquid into the opening; that could damage the device or cause electric shock.
- Always keep strong magnetic or electrical objects away from the device.
- If any of the following situations arises, get the device checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the device.
  - The device has been exposed to moisture.
  - The device does not work well or you can not get it working according to the User Guide.
  - The device has dropped and damaged.
  - The device has obvious sign of breakage.

Regulatory Notices

CE Conformity

Products bearing the CE marking comply with one or more of the following EU Directives as may be applicable:

- RED 2014/53/EU
- Low Voltage Directive 2014/35/EU
- EMC Directive 2014/30/EU
- RoHS Directive 2011/65/EU
- ErP Directive 2009/125/EC

Compliance with these directives is assessed using applicable European Harmonized Standards.

The point of contact for regulatory matters is MSI-Europe: Eindhoven 5706 5692 ER Son.

Products with Radio Functionality (EMF)

This product incorporates a radio transmitting and receiving device. For computers in normal use, a separation distance of 20 cm ensures that radio frequency exposure levels comply with EU requirements. Products designed to be operated at closer proximities, such as tablet computers, comply with applicable EU requirements in typical operating positions. Products can be operated without maintaining a separation distance unless otherwise indicated in instructions specific to the product.

Restrictions for Products with Radio Functionality (select products only)

CAUTION: IEEE 802.11x wireless LAN with 5.15~5.35 GHz frequency band is restricted for indoor use only in all European Union member states, EFTA (Iceland, Norway, Liechtenstein), and most other European countries (e.g., Switzerland, Turkey, Republic of Serbia). Using this WLAN application outdoors might lead to interference issues with existing radio services.

Radio frequency bands and maximum power levels

- Features: Wi-Fi 6E, BT
- Frequency Range:

  2.4 GHz: 2400~2485MHz

  5 GHz: 5150~5350MHz, 5470~5725MHz, 5725~5850MHz

  6 GHz: 5955~6415MHz
- Max Power Level:

  2.4 GHz: 20dBm

  5 GHz: 23dBm

  6 GHz: 23dBm

FCC-B Radio Frequency Interference Statement

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 instruction manual, 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 measures listed below:

- 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/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user' s authority to operate the equipment.

Notice 2

Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

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.

MSI Computer Corp.

901 Canada Court, City of Industry, CA 91748, USA

(626) 913-0828

www.msi.com

WEEE Statement

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2012/19/EU, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.

Chemical Substances Information

In compliance with chemical substances regulations, such as the EU REACH Regulation (Regulation EC No. 1907/2006 of the European Parliament and the Council), MSI provides the information of chemical substances in products at:
https://csr.msi.com/global/index

RoHS Statement

Japan JIS C 0950 Material Declaration

A Japanese regulatory requirement, defined by specification JIS C 0950, mandates that manufacturers provide material declarations for certain categories of electronic products offered for sale after July 1, 2006.
https://csr.msi.com/global/Japan-JIS-C-0950-Material-Declarations

India RoHS

This product complies with the "India E-waste (Management and Handling) Rule 2016" and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1 weight % and 0.01 weight % for cadmium, except for the exemptions set in Schedule 2 of the Rule.

Turkey EEE Regulation

Conforms to the EEE Regulations of the Republic Of Turkey

Ukraine Restriction of Hazardous Substances

The equipment complies with requirements of the Technical Regulation, approved by the Resolution of Cabinet of Ministry of Ukraine as of 10 March 2017, № 139, in terms of restrictions for the use of certain dangerous substances in electrical and electronic equipment.

Vietnam RoHS

As from December 1, 2012, all products manufactured by MSI comply with Circular 30/2011/TT-BCT temporarily regulating the permitted limits for a number of hazardous substances in electronic and electric products.

Green Product Features

- Reduced energy consumption during use and stand-by
- Limited use of substances harmful to the environment and health
- Easily dismantled and recycled
- Reduced use of natural resources by encouraging recycling
- Extended product lifetime through easy upgrades
- Reduced solid waste production through take-back policy

Environmental Policy

- The product has been designed to enable proper reuse of parts and recycling and should not be thrown away at its end of life.
- Users should contact the local authorized point of collection for recycling and disposing of their end-of-life products.
- Visit the MSI website and locate a nearby distributor for further recycling information.
- Users may also reach us at gpcontdev@msi.com for information regarding proper disposal, take-back, recycling, and disassembly of MSI products.

Upgrade and Warranty

Please note that certain components preinstalled in the product may be upgradable or replaceable by user' s request. For any further information about the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Acquisition of Replaceable Parts

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time. Please contact the manufacturer via https://www.msi.com/support/ for the detailed information about the acquisition of spare parts.

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Technical Support

If a problem arises with your system and no solution can be obtained from the user' s manual, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance. Visit the MSI website for technical guide, BIOS updates, driver updates and other information via

https://www.msi.com/support/