

# **PE100A** Desktop PC

**User Manual** 



## E17363 Revised Edition V3 November 2020

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## About this manual

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

## Chapter 1: Getting to know your Edge Computer

This chapter details the hardware components of your Edge Computer.

#### **Chapter 2: Using your Edge Computer**

This chapter provides you with information on using your Edge Computer.

## Chapter 3: Upgrading your Edge Computer

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

## **Chapter 4: Setting up your Edge Computer**

This chapter will guide you on setting up your Edge Computer for the first time.

#### Appendix

This section includes notices and safety statements your Edge Computer.

## **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 Edge Computer's data and components.

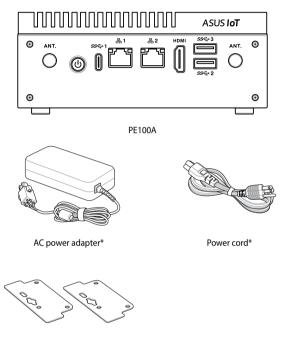
## Typography

**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 Edge Computer package contains the following items:



Wall mount kit

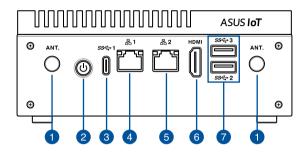
## NOTE:

- \*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.

# Getting to know your Edge Computer

# 1.1 Features

## 1.1.1 Front view



## 1

## ANT. Antenna hole

The antenna hole allows you to connect a wireless antenna to enhance wireless signal reception.



#### Power button

The power button allows you to turn the Edge Computer on or off. You can use the power button to put your Edge Computer to sleep mode or press it for ten (10) seconds to force shutdown your Edge Computer.



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## USB 3.2 Gen 1 Type-C<sup>®</sup> OTG port

This USB Type-C<sup>®</sup> OTG (Universal Serial Bus) port provides a transfer rate of up to 5 Gbit/s, and provides a maximum of 5V/1.5A output. This port supports OTG mode that can be taken to replace UART debug console.



## 品1 LAN port

The Realtek® RTL8211 Ethernet controllers with 8-pin RJ-45 LAN port supports a standard Ethernet cable for 10/100/1000 Mbps connection to a local network.



## 品2 LAN port

The Intel® I211-AT Gigabit Ethernet controllers with 8-pin RJ-45 LAN port supports a standard Ethernet cable for 10/100/1000 Mbps connection to a local network.



## HDMI HDMI port

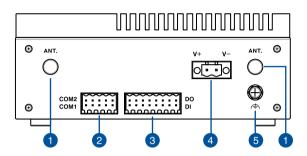
The integrated 19-pin HDMI (High Definition Multimedia Interface) 2.0 port with a receptacle connector can support resolutions up to 3840 x 2160 @ 60 Hz on external display devices.



#### SSC→ USB 3.2 Gen 1 port

The USB 3.2 Gen 1 (Universal Serial Bus) port provides a transfer rate up to 5 Gbit/s.

## 1.1.2 Rear view

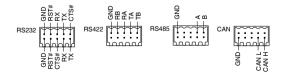


#### ANT. Antenna hole

The antenna hole allows you to connect a wireless antenna to enhance wireless signal reception.

## COM2 Serial (COM) terminal connector

The 10-pin Serial (COM) terminal connector can support 1 x RS-232/422/485 and 1 x RS-232/CAN Bus COM headers and allows you to connect devices that have serial ports such as bar code scanner, modem, or printers. Please refer to the illustrations below for the pin definition of the Serial (COM) terminal connector.



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#### Isolated DIO connector

The Isolated Digital Input/Output (DIO) connector provides electrical isolation (up to 2500 VDC) of digital input and output signals, which allow micro controllers to detect and output logic states. The high voltage protection can be used in industrial level uses. Please refer to the illustration below for the pin definition of the Isolated DIO connector.





#### **Power input**

The supplied terminal block power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the Edge Computer.

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



#### Functional Earth Ground

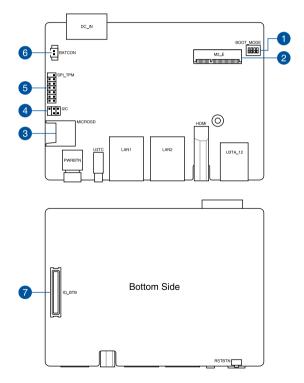
The Functional Earth Ground provides you with a grounding point.

# **1.2 Motherboard Overview**

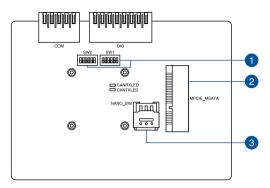
## 1.2.1 Motherboard layout

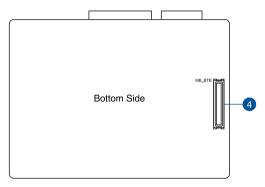
The PE100A is an Edge Computer based on a Pico-ITX motherboard, and is supported by a secondary I/O board for extra functionality. Please refer to the table for the page numbers of the numbered items.

## Pico-ITX motherboard



## Secondary I/O board



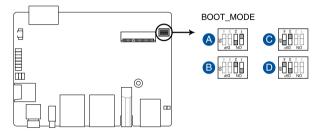


Lay	Layout contents Pa				
Pico-	ITX motherboard				
1.	Boot Mode switch	17			
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3.	Micro SD card slot	18			
4.	I2C connector	19			
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3.	Nano SIM Card slot	23			
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## 1.2.2 Pico-ITX motherboard

## 1. Boot Mode switch

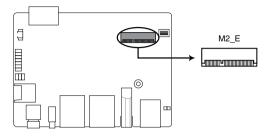
The Boot Mode switch allows you to configure between different boot modes and the location to boot from. Please refer to the table below for the different boot modes.



Boot Mode			Boot type	
	1	2	воостуре	
A	OFF	ON	Serial Downloader	
B	ON	OFF	Internal Boot (default)	
Boot Mode				
Boo	ot Mode		Post turns	
Boo	ot Mode 3	4	Boot type	
Boo	ot Mode 3 OFF	<b>4</b> ON	Boot type eMMC (default)	

## 2. M.2 Wi-Fi slot

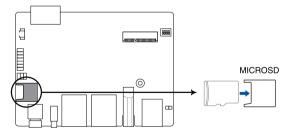
The M.2 Wi-Fi slot allows you to install an M.2 Wi-Fi module (E-key, type 2230).



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

## 3. Micro SD Card slot

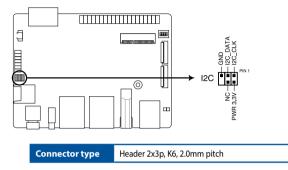
The Micro SD Card slot allows you to install a Micro SD card.



NOTE: The Micro SD card is purchased separately.

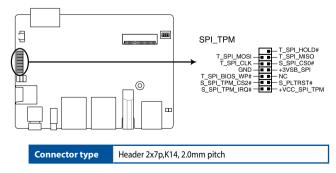
## 4. I2C connector

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



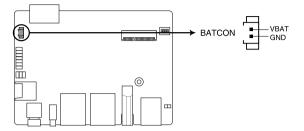
## 5. SPI TPM connector

The SPI TPM connector supports a Trusted Platform Module (TPM) system, which can securely store keys, digital certificates, passwords, and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.



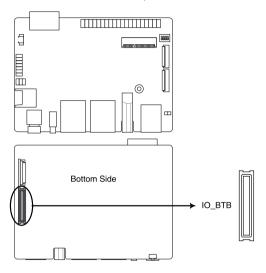
## 6. RTC Battery connector

The RTC Battery connector allows you to connect the lithium CMOS battery.



## 7. IO Board-to-Board connector

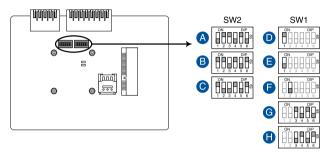
The IO Board-to-Board connector allows you to connect the Pico-ITX motherboard and secondary I/O board.



## 1.2.3 Secondary I/O board

## 1. IO board switch

The IO Board switch allows you to configure between different configurations for the onboard slots and ports. Please refer to the tables below for the different switch configurations.



## SW2

Terminator							Output ture
	1	2	3	4	5	6	Output type
A	OFF	ON	ON	OFF	ON	OFF	RS-232 (default)
B	ON	ON	OFF	ON	OFF	ON	RS-422
0	ON	OFF	OFF	ON	OFF	ON	RS-485

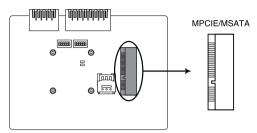
## SW1

mP	PCIe / mSATA			Ter	minator
	1	Output type			2
D	ON	mPCIe (default)		Ð	OFF (default
Ø	OFF	mSATA			

Terr	minator	Output ture				
	3	4	5	6	Output type	
G	ON	OFF	ON	OFF	RS-232 (default)	
0	OFF	ON	OFF	ON	CAN Bus	

## 2. Mini PCIe/mSATA slot

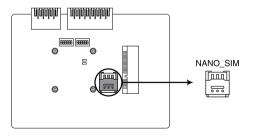
The Mini PCle / mSATA slot allows you to install a Mini PCle peripheral device or a mSATA peripheral device. The default setting for the slot is Mini PCle, to switch to mSATA please refer to the **IO board switch**.



**NOTE:** The Mini PCIe / mSATA peripheral device is purchased separately.

## 3. Nano SIM Card slot

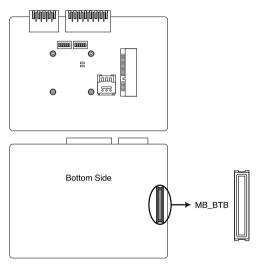
The Nano SIM Card slot allows you to install a Nano SIM card.



NOTE: The Nano SIM card is purchased separately.

## 4. Motherboard Board-to-Board connector

The Motherboard Board-to-Board connector allows you to connect the Pico-ITX motherboard and secondary I/O board.



# Using your Edge Computer

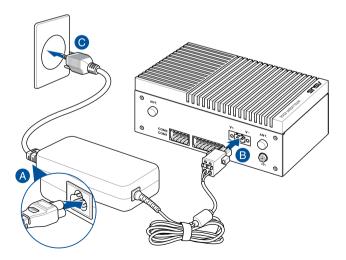
# 2.1 Getting started

## 2.1.1 Connect the AC power adapter to your Edge Computer

To connect the AC power adapter to your Edge Computer:

- A. Connect the power cord to the AC power adapter.
- B. Connect the DC power connector into your Edge Computer's power (DC) input.
- C. 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 Edge Computer.
- We strongly recommend that you use a grounded wall socket while using your Edge Computer.
- The socket outlet must be easily accessible and near your Edge Computer.
- To disconnect your Edge Computer from its main power supply, unplug your Edge Computer from the power socket.

## NOTE:

Please refer to the following for more information on the adapter:

65W Power adapter

- Input voltage: 100-240 Vac
- Input frequency: 50-60 Hz
- Rating output current: 5.417A / 3.42A (65.0 W)
- Rating output voltage: 12.0V / 19.0V

#### WARNING!

- Do not disable or remove the power cord grounding plug, the grounding is an important safety feature.
- Ensure to plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.

## 2.1.2 Connect a display panel to your Edge Computer

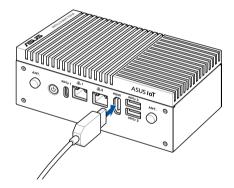
You can connect a display panel or projector to your Edge Computer that has the following connectors:

HDMI connector

## To connect a display panel to your Edge Computer:

Connect one end of an HDMI cable to an external display, and the other end of the cable to your Edge Computer's HDMI port.

Connect display via HDMI port



# 2.1.3 Connect the USB cable from keyboard or mouse

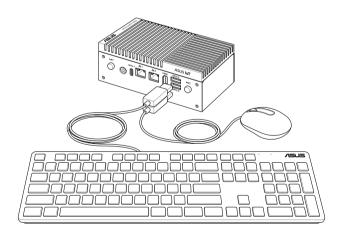
You can connect generally any USB keyboard and mouse to your Edge Computer. You can also connect a USB dongle for a wireless keyboard and mouse set.

## To connect a keyboard and mouse to your Edge Computer:

Connect the USB cable from your keyboard and mouse to any of the USB ports of your Edge Computer.

#### NOTE:

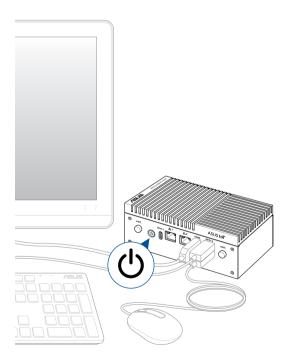
- The keyboard varies with country or region.
- The keyboard and mouse are purchased separately.



## 2.1.4 Turn on your Edge Computer

Press the power button to turn on your Edge Computer.

**NOTE:** The Edge computer will power on automatically the first time it is connected to a power source.



# 2.2 Turning your Edge Computer off

If your Edge Computer is unresponsive, press and hold the power button for at least ten (10) seconds until your Edge Computer turns off.




# Upgrading your Edge Computer

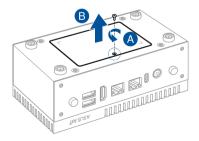
#### **IMPORTANT!**

- 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.
- Turn off the power of your Edge Computer, and allow it to cool for at least 10 minutes before performing any installation/ uninstallation process.

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

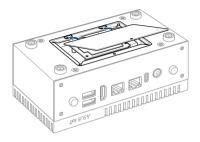
## 3.1 Removing the bottom cover

- Turn off your Edge Computer then disconnect all cables and peripherals.
- 2. Place the Edge Computer on a flat stable surface, with its top side facing down.
- Remove the screw from the bottom cover (A), then remove the bottom cover (B).

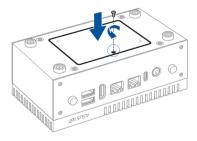


# 3.2 Replacing the bottom cover

1. Align the bottom cover latches with the latch holes on the bottom of your Edge Computer.

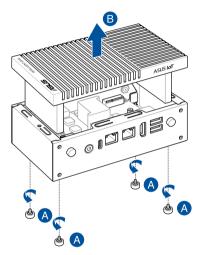


2. Secure the bottom cover using the screw removed previously.



# 3.3 Removing the top cover

- 1. Turn off your Edge Computer then disconnect all cables and peripherals.
- 2. Remove the four (4) rubber feet screws from the bottom of the Edge Computer (A), then remove the top cover (B).

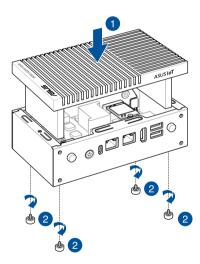


## 3.4 Replacing the top cover

1. Place the top cover into the Edge Computer chassis and ensure the ASUS IoT logo is facing the front of the Edge Computer.

**IMPORTANT!** Ensure that the RF cables or other cables are not under or in the way of the top cover when installing the top cover, as this may cause the antennas to not work properly.

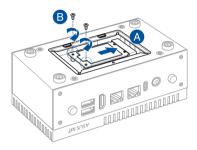
2. Secure the top cover from the bottom of the Edge Computer using the four (4) rubber feet screws removed previously.



# **3.5 Installing the Mini PCIe or mSATA card (Bottom side)**

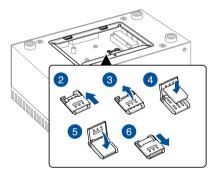
Your Edge Computer comes with a Mini PCIe / mSATA slot that allows you to install a Mini PCIe peripheral card or a mSATA card on the bottom side of the Edge Computer.

Align and insert the Mini PCIe or mSATA card into the slot (A) and press it down, then secure it in place using two (2) screws (B).



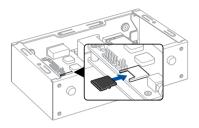
# 3.6 Installing a nano SIM card (Bottom side)

- 1. (optional) Remove the Mini PCle card if there is a Mini PCle card installed by removing the two (2) screws securing the Mini PCle card first, then removing the Mini PCle card.
- 2. Push the nano SIM cover towards the back of your Edge Computer.
- 3. Lift the nano SIM cover.
- 4. Place the nano SIM into the nano SIM slot.
- 5. Replace the nano SIM cover.
- 6. Push the nano SIM cover towards the front of your Edge Computer to secure the nano SIM card.



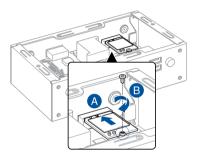
## 3.7 Installing an SD card (Top side)

Insert your SD card into the SD card slot. Ensure that the SD card is pushed all the way into the SD card slot.



# **3.8 Installing the wireless card** (Top side)

- 1. Remove the M.2 stand screw.
- 2. Align and insert the wireless card into its slot inside the Edge Computer (A), then gently push down the wireless card on top of the screw hole and fasten it using the previously removed stand screw (B).



3. (optional) Connect the antennas to your wireless card.

#### NOTE:

- Please refer to the *Installing the antennas* section for more information on installing the antennas.
- 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.

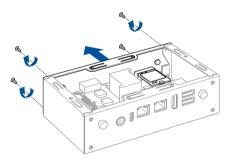
## 3.9 Installing the antennas (optional)

You may install antennas to the four (4) antenna holes located on the front and rear panels. The installed antennas can be connected to a WWAN card installed in the Mini PCle slot (bottom side), or to a wireless card installed in the M.2 Wi-Fi slot (top side).

**NOTE:** It is recommended that you install the antennas connected to the WWAN card to the front panel, and install the antennas connected to the wireless card to the rear panel.

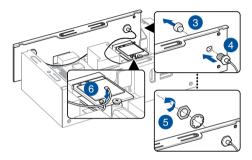
#### Installing the wireless card antennas

1. Remove the rear panel cover by removing the four (4) screws from the cover.

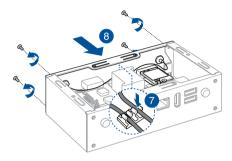


2. Prepare the RF connector and cable.

- 3. Remove the rubber caps from the antenna hole.
- 4. Insert the antenna jack end of the RF connector and cable into the antenna hole from within the chassis outwards.
- 5. Insert the bundled O-ring to the antenna jack, then secure the antenna jack using bundled hex screw.
- 6. Connect the other end of the RF connector and cable to your wireless card.

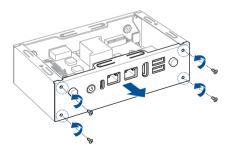


- (optional) You can use the cable clip to organize the cables after installing the antenna.
- 8. Replace the cover previously removed and secure it using the four (4) screws previously removed.



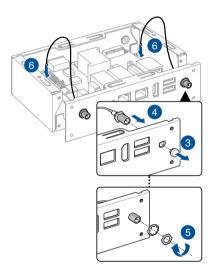
### Installing the WWAN antennas

1. Remove the front panel cover by removing the four (4) screws from the cover.

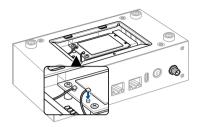


2. Prepare the RF connector and cable.

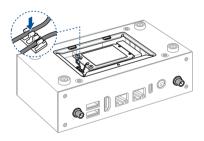
- 3. Remove the rubber caps from the antenna hole.
- 4. Insert the antenna jack end of the RF connector and cable into the antenna hole from within the chassis outwards.
- 5. Insert the bundled O-ring to the antenna jack, then secure the antenna jack using bundled hex screw.
- 6. Thread the cables from both sides of the motherboard to the bottom of the device.



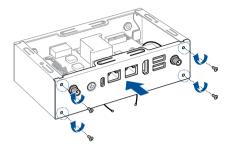
7. Connect the other end of the RF connector and cable to your WWAN card.



 (optional) You can use the cable clip to organize the cables after installing the antenna.



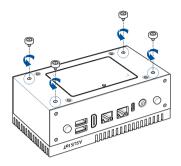
9. Replace the cover previously removed and secure it using the four (4) screws previously removed.



10. Replace the top cover. You may refer to **3.4 Replacing the top cover** for more details.

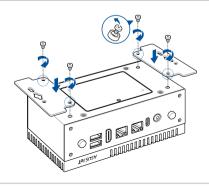
## 3.10 Installing the wall mount

1. Remove the four (4) rubber feet screws.



 Align the wall mount with the rubber feet screw holes, then remove the rubber feet from the rubber feet screws and secure the wall mount to your Edge Computer using the rubber feet screws.

**NOTE:** The rubber feet screws and wall mount screws are the same screws.



# 3.11 Installing the terminal block (optional)

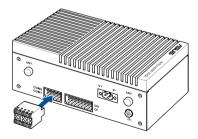
You may install terminal blocks into the **Serial (COM) terminal connector** and **Isolated DIO connector** which allow you to support additional devices with serial ports or micro controllers by referring to the pin definitions and connecting cables to the slots on the terminal blocks as needed.

**IMPORTANT!** Connect only one (1) cable to a slot on the terminal block.

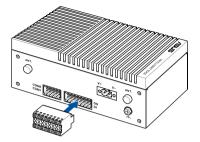
#### NOTE:

- The terminal block is purchased separately.
- Please refer to 1.1.2 Rear view for the location and pin definitions of the Serial (COM) terminal connector and Isolated DIO connector.

## Installing a terminal block to the Serial (COM) terminal connector



Installing a terminal block to the Isolated DIO connector





## Setting up your Edge Computer

## 4.1 Requirements

Before you start setting up your Edge Computer, please make sure you have the following available:

- 1 x USB Type-C<sup>®</sup> cable with data transfer function (to connect your PC to the PE100A's data port)
- 1 x Power supply
- 1 x Monitor with HDMI cable
- 1 x Keyboard and Mouse set

**NOTE:** Ensure to use the bundled power supply, or, if you are using another power supply, ensure to use a 12~24V power supply.

## 4.2 Flashing the PE100A

Before you begin the flashing procedure, please ensure of the following:

- The PE100A is completely powered off, and the power cord and cables connecting your PE100A to your computer are all disconnected.
- The Boot Mode switch are set to eMMC mode, please refer to Boot Mode switch under the 1.2.2 Onboard switch section for more information on setting the Boot Mode switch

#### **Initiating Fastboot mode:**

- 1. Connect the USB Type-C° cable to the USB Type-C° ports on your PE100A and host computer.
- 2. Power on your PE100A, you should automatically be booted into Fastboot mode.

#### NOTE:

- Please note that you will only be booted into Fastboot mode when booting up PE100A for the first time.
- Please refer to the readme file in the unzipped image folder for details on other items such as re-flash or recovery.

### Executing the flash script:

- 1. Download the OS image from the PE100A website, then unzip the image file.
- Run the flash script or command file to start the flash process. The flash process should take a few minutes. Once the flash is completed, your PE100A will reboot and you should be booted to the terminal prompt.

**NOTE:** Please refer to the readme file in the unzipped image folder for troubleshooting steps.




## **Safety information**

Your Edge Computer 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.
- Peripherals with extended temperature tolerance (such as industrial grade mSATA, Micro SD card, etc.) will allow this product to be used in environments with ambient temperatures between -20°C and 60°C, with a 0.1m/s air flow.
- The product should be used in environments with an ambient temperature of 40°C when using the 65W adapter.
- 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.
- Restricted Access Location:

The equipment should only be installed in a Restricted Access Area where both these conditions apply:

- access can only be gained by USERS who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and
- access is through the use of a TOOL or lock and key, or other means of security, and is controlled by the authority responsible for the location.
- This device shall not be connected to an Ethernet network with outside plant routing.

## 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 Edge Computer 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.

## 使用警告

付属のACアダプターおよび電源コードは本機専用です。他の製品には使用しないでください。また、他のACアダプターおよび電源コードを本機に使用しないでください。故障や事故の原因となります。

## **Regulatory notices**

## **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.

## **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 A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. **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.

## **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.

## **End Product Labeling**

This transmitter module is authorized only for use in device where the antenna may be installed such that 20cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following:

Contains FCC ID: TX2-RTL8822CE and Contains IC:6317A-RTL8822CE

## **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.

## **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(A)/NMB-3(A)

## 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(A)/NMB-3(A)

## **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

### **KC: Korea Warning Statement**

Class A: 사용자 안내문 이 기기는 업무용 환경에서 사용할 목적으로 적합성평가를 받은 기기로서 가정용 환경에서 사용하는 경우 전파간섭의 우려가 있습니다.

## VCCI: Japan Compliance Statement

### **Class A ITE**

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害 を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう 要求されることがあります。 VCCI-A

### **Japan RF Equipment Statement**

### 屋外での使用について

本製品は、5GHz帯域での通信に対応しています。電波法の定めにより 5.2GHz、5.3GHz帯域の電波は屋外で使

用が禁じられています。

#### 法律および規制遵守

本製品は電波法及びこれに基づく命令の定めるところに従い使用してください。日本国外では、その国の法律ま

たは規制により、本製品の使用ができないことがあります。このような国では、本製品を運用した結果、罰せられ

ることがありますが、当社は一切責任を負いかねますのでご了承ください。

## 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 <u>http://csr.asus.com/Compliance.htm</u> for information disclosure based on regulation requirements ASUS is complied with:

#### EU REACH and Article 33

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 <a href="http://csr.asus.com/english/REACH.htm">http://csr.asus.com/english/REACH.htm</a>

#### EU RoHS

This product complies with the EU RoHS Directive. For more details, see <a href="http://csr.asus.com/english/article.aspx?id=35">http://csr.asus.com/english/article.aspx?id=35</a>

#### Japan JIS-C-0950 Material Declarations

Information on Japan RoHS (JIS-C-0950) chemical disclosures is available on <u>http://csr.asus.com/english/article.aspx?id=19</u>

#### 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 năm2011 trở về sau, đều phải đáp ứng các yêu cầu của Thông tư 30/2011/TT-BCT của Việt Nam.

#### **Turkey 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 <u>http://csr.asus.com/english/Takeback.htm</u> for detailed recycling information in different regions.

#### **Ecodesign Directive**

European Union announced a framework for the setting of ecodesign requirements for energy-related products (2009/125/EC). Specific Implementing Measures are aimed at improving environmental performance of specific products or across multiple product types. ASUS provides product information on the CSR website. The further information could be found at <u>https://csr.asus.com/english/article.aspx?id=1555</u>.

#### **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 is automatically set to sleep within 10 minutes of user inactivity; the computer is automatically set to sleep within 30 minutes of user inactivity. To wake your computer, click the mouse, press any key on the keyboard, or press the power button.

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

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

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