VivoMini UN68U

User Manual

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

E13464
First Edition
September 2017

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About this manual

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

Chapter 1: Getting to know your VivoMini

This chapter details the hardware components of your VivoMini.

Chapter 2: Using your VivoMini

This chapter provides you with information on using your VivoMini.

Chapter 3: Memory upgrade

This chapter provides you with information on how to install new memory modules to your VivoMini.

Appendix

This section includes notices and safety statements for your VivoMini.

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.

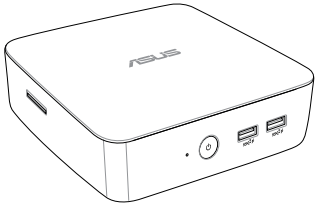
WARNING! This message contains important information that must be followed to keep you safe while performing certain tasks and prevent damage to your VivoMini's data and components.

Typography

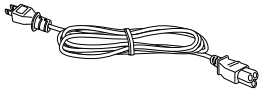
Bold text	Indicates a menu or an item to select.
Italic	This indicates sections that you can refer to in this manual.

Package contents

Your VivoMini package contains the following items:



VivoMini



Power cable*

Technical documentations

AC power adapter*

NOTE:

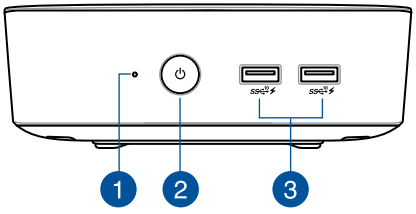
- *Actual product specifications and package contents may vary depending on the model type, country, or region.
- If the device or any of its components fail or malfunction during normal or proper use and it is still within the warranty period, bring the device and the warranty card to you nearest ASUS Service Center.

1

Getting to know your VivoMini

Features

Front panel



1 Drive activity indicator

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

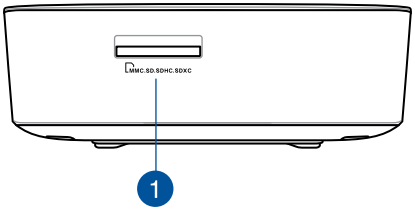
2 Power button

The power button allows you to turn the VivoMini on or off. You can also press the power button once to put your VivoMini to sleep mode.

3 USB 3.1 Gen 2 ports

This USB 3.1 Gen 2 (Universal Serial Bus 3.1) port provides a maximum of 1.5A output current, transfer rate of up to 10 Gbit/s and is backward compatible to USB 2.0. The ⚡ icon indicates this port's USB Charger+ feature which allows you to quick-charge mobile devices.

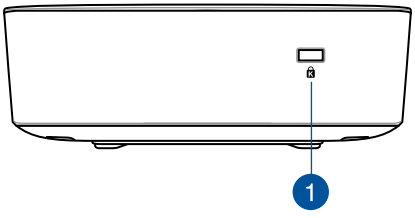
Left panel



1 **Memory card slot**

The built-in memory card reader enables your VivoMini to read and write data to and from MMC/SD/SDHC/SDXC cards.

Right panel

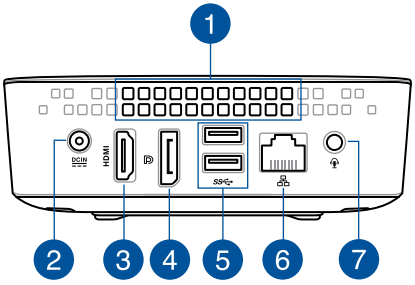


1 **Kensington® security slot**

The Kensington® security slot allows you to secure your VivoMini using Kensington® compatible security products.

NOTE: The position for this slot may vary per model.

Rear panel



1 Air vents

The air vents allow warm air to exit your VivoMini chassis.

NOTE: The air vents found on the bottom side of your VivoMini allow cool air to enter your device. It is recommended that you place your VivoMini on a flat stable surface for optimum air ventilation.

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

2 DCIN Power input (DC 19V)

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

3 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.

4

DisplayPort

The DisplayPort sends high-performance digital output from your VivoMini to a display device such as an LCD TV or HD monitor.

5 SS

USB 3.1 Gen1 port

This USB 3.1 Gen1 (Universal Serial Bus) port provides a transfer rate of up to 5 Gbit/s and is backward compatible to USB 2.0.

6

LAN port

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

7

Headphone output/microphone input combo jack port

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

NOTE: This port does not support three-conductor 3.5mm microphone.

2

Using your VivoMini

Getting started

Connecting the AC power adapter

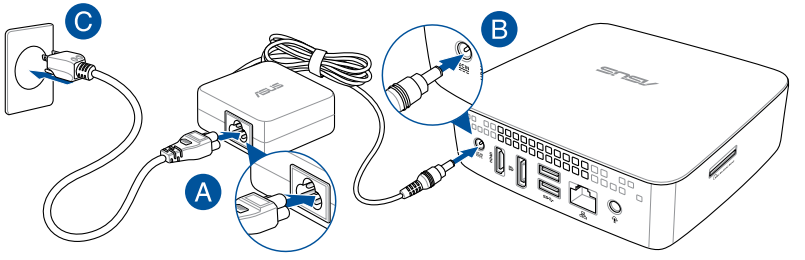
To connect the AC power adapter to your VivoMini:

A. Connect the AC power cord to the AC/DC adapter.

B. Connect the DC power connector into your VivoMini's power (DC) input port.

C. Plug the AC power cord into a 100 V~240 V power source.

NOTE: The power adapter may vary in appearance depending on the model or region.



IMPORTANT!

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

NOTE:

Power adapter information:

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

Connecting a display panel

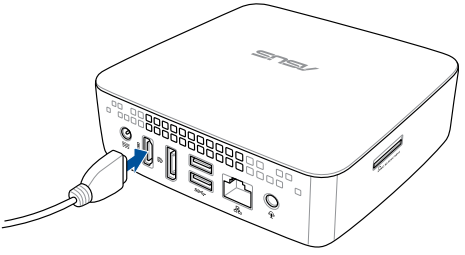
You can connect a display panel or projector to your VivoMini that has the following connectors:

- HDMI connector
- DisplayPort connector

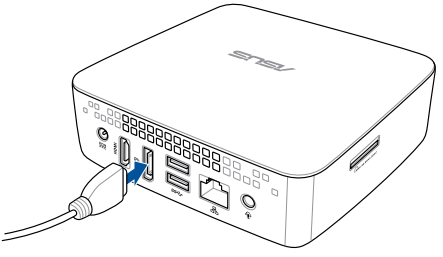
To connect a display panel to your VivoMini:

Connect a display cable either to the HDMI or DisplayPort.

Connecting display via HDMI port



Connecting display via DisplayPort



Connecting USB keyboard or mouse

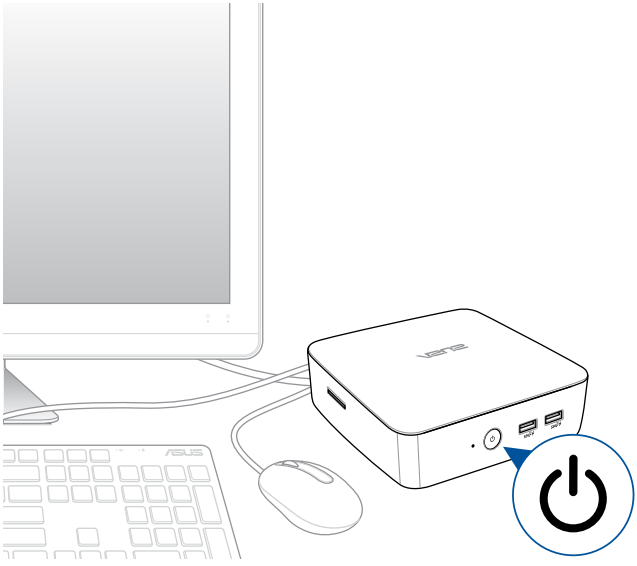
You can connect generally any USB keyboard and mouse to your VivoMini. You can also connect a USB dongle for a wireless keyboard and mouse set.

To connect a keyboard and mouse to your VivoMini:

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

Turning on your VivoMini

Press the power button to turn on your VivoMini.



Turning off your VivoMini

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

Putting your VivoMini to sleep

To put your VivoMini 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 VivoMini.

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.

Quickly enter the BIOS

To quickly enter the BIOS:

- Press the power button for at least four (4) seconds to shut down your VivoMini, then press the power button again to turn your VivoMini back on, then press <F2> or <Del> during POST.
- When your VivoMini is off, disconnect the power cord from your VivoMini's power connector. Reconnect the power cable and press the power button to turn on your VivoMini. Press <F2> or <Del> during POST.

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

3 Upgrading your VivoMini

Upgrading memory modules

Your VivoMini comes with two SO-DIMM memory slots that allow you to install two 2 GB, 4 GB, 8 GB, or 16 GB DDR4 SO-DIMMs for a maximum of 32 GB memory.

IMPORTANT!

- It is recommended that you replace the memory modules under professional supervision. Visit an ASUS service center for further assistance.
- Refer to http://www.asus.com for the list of compatible DIMMs. You can only install DDR4 SO-DIMMs to the VivoMini's DIMM slots.

WARNING!

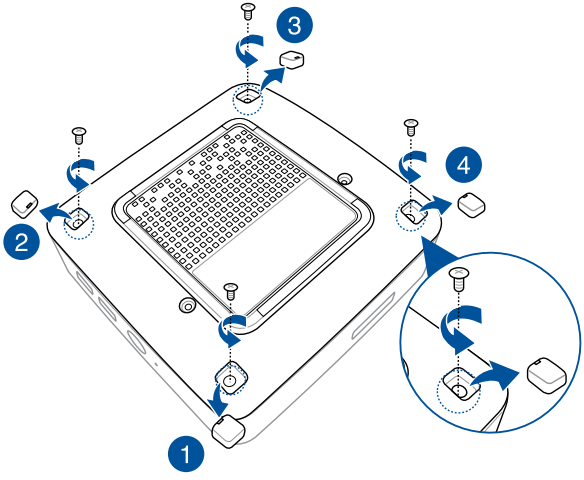
- Ensure that your hands are dry before proceeding with the rest of the installation process.
- Before installing memory modules, use a grounded wrist strap or touch a safely grounded object or metal object to avoid damaging them due to static electricity.

To install or upgrade the memory modules:

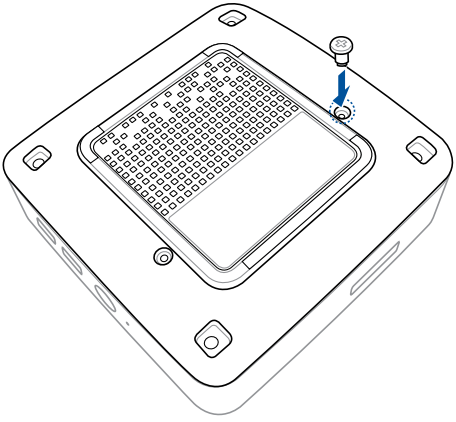
1. Turn off your VivoMini then disconnect all cables and peripherals.
2. Place the VivoMini on a flat stable surface, with its top side facing down.

3. Using a flat-head screwdriver or straightened paper clip, remove the rubber feet from the bottom side and set them aside, then remove the four (4) screws securing the cover.

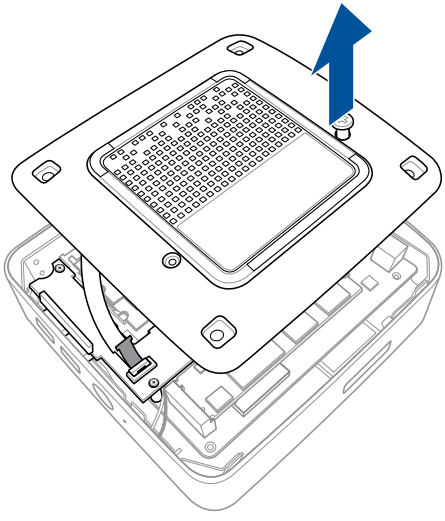
IMPORTANT! Take note of the orientation of the holed rubber foot on the cover, and the number printed under each rubber foot. These indicate the sequence you must follow when removing the rubber foot from its slot. Refer to the following illustration for details.



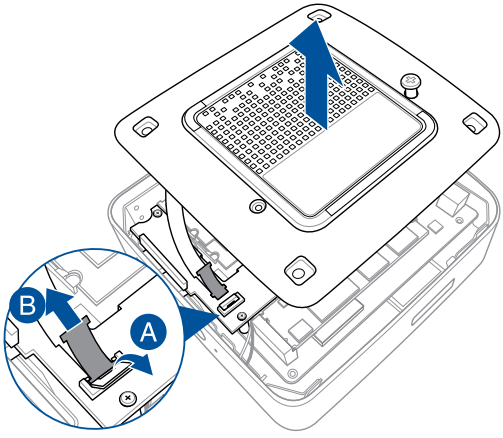
4. Get one screw from the ones you previously removed then place it into the hole. Leave a portion of the screw head that would be enough for you to hold.



5. Hold the screw then gently lift the cover slightly from the bottom side of the VivoMini. Use your other free hand to hold the VivoMini in place.

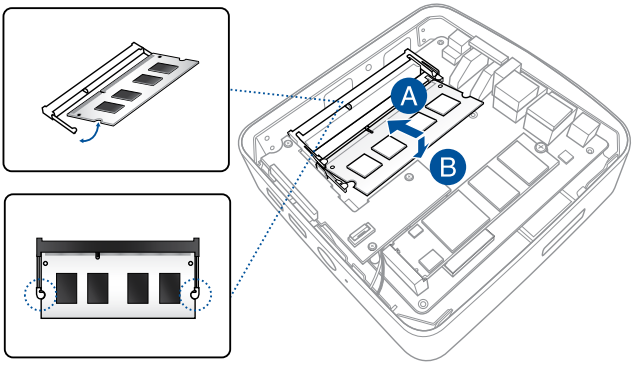


6. (optional) If a 2.5" HDD is already installed, remove the HDD cable before removing the bottom cover completely. Lift the flap from the SATA connector (A), then remove the HDD cable from the SATA connector (B).



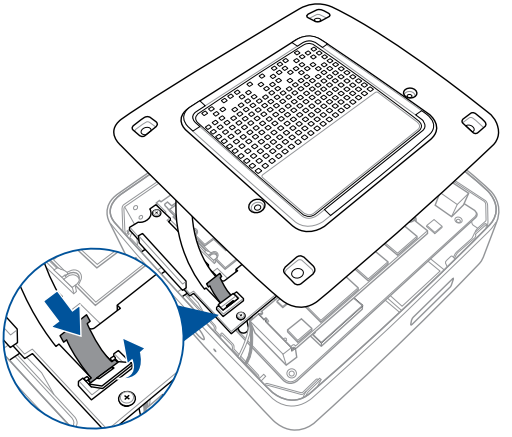
7. Align and insert the memory module into the slot (A) and press it down (B) until it is securely seated in place. Repeat the same steps to install the other memory module.

IMPORTANT! Always install into the lower slot first.

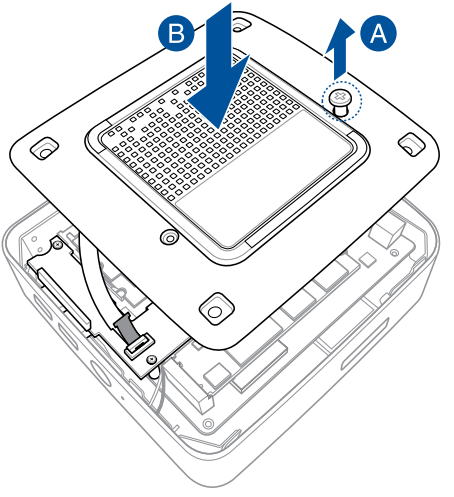


8. (optional) If a 2.5" HDD is installed, insert the HDD cable into the SATA connector, then push the flap down to secure the HDD cable.

NOTE: Ensure the HDD cable is seated securely in the SATA connector.

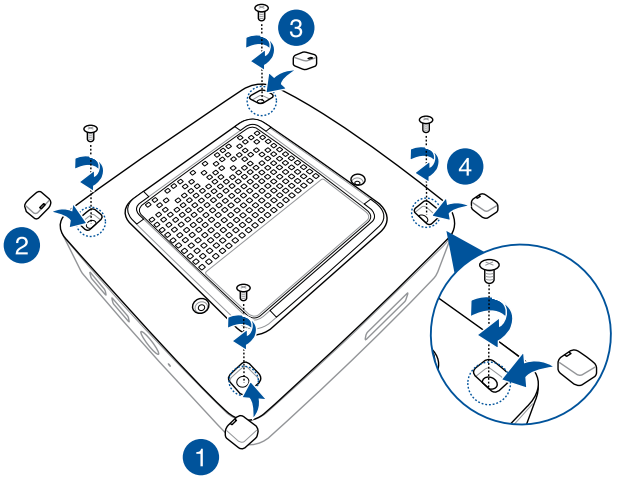


9. Remove the screw you previously attached on the bottom cover (A), then align and insert the bottom cover back on your VivoMini (B)



10. Reattach the screws to secure the cover back on the bottom side of the main box, then replace the rubber feet back on each screw hole.

IMPORTANT! Take note of the orientation of the holed rubber foot on the cover, and the number printed under each rubber foot. These indicate the sequence you must follow when replacing the rubber foot back into each slot. Refer to the following illustration for details.

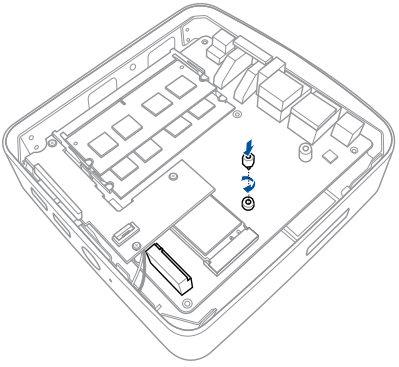


Installing or upgrading the M.2 SSD

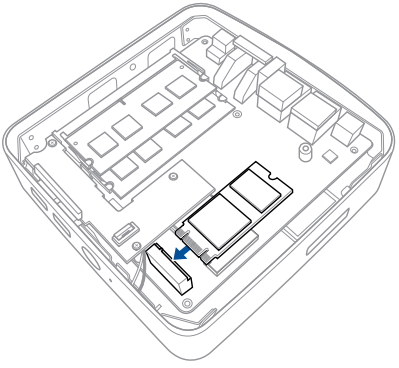
Your VivoMini includes an M.2 slot that supports a 2280 or a 2242 M.2 SSD.

To install or upgrade a 2242 M.2 SSD:

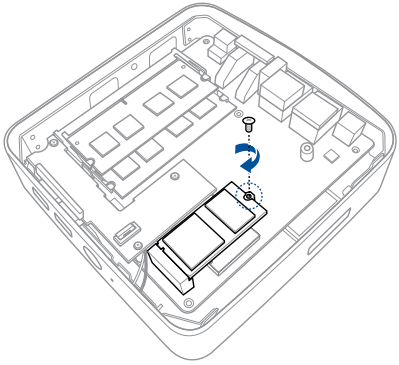
1. Follow steps 1-6 under the *Installing or upgrading memory modules* section to remove the bottom cover of your VivoMini.
2. Insert the hexagon screw, as illustrated.



3. Align and insert the 2242 M.2 SSD into its slot inside the VivoMini.



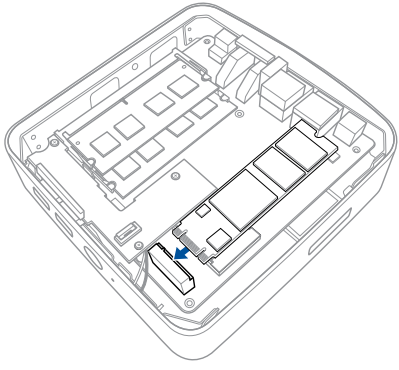
4. Gently push down the 2242 M.2 SSD on top of the screw hole and fasten it using the bundled screw.



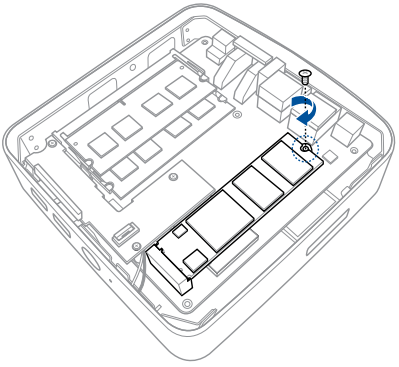
5. Follow steps 8-10 under the *Installing or upgrading memory modules* section to to replace the bottom cover back on your VivoMini.

To install or upgrade a 2280 M.2 SSD:

1. Follow steps 1-6 under the *Installing or upgrading memory modules* section to remove the bottom cover of your VivoMini.
2. Align and insert the 2280 M.2 SSD into its slot inside the VivoMini.



3. Gently push down the 2280 M.2 SSD on top of the screw hole and fasten it using the bundled screw.



4. Follow steps 8-10 under the *Installing or upgrading memory modules* section to to replace the bottom cover back on your VivoMini.

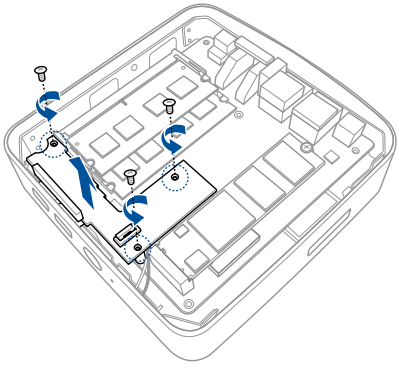
Installing or upgrading the wireless card

Your VivoMini includes an M.2 slot for 2230 wireless and Bluetooth adapters.

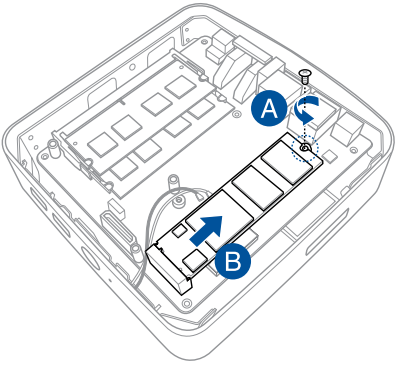
Refer to http://www.asus.com for the list of compatible wireless and Bluetooth adapters.

To install or upgrade the wireless card:

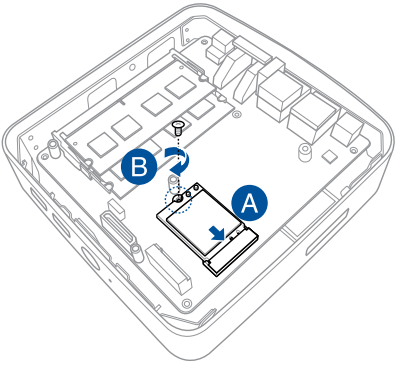
1. Follow steps 1-6 under the I*nstalling or upgrading memory modules* section to remove the bottom cover of your VivoMini.
2. Remove the three (3) screws from the USB 3.1 Gen 1 expansion card, then remove it from the chassis.



3. (optional) Remove the M.2 SSD if it is installed. Remove the screw securing the M.2 SSD (A), then remove the M.2 SSD from the slot (B) and place it aside.

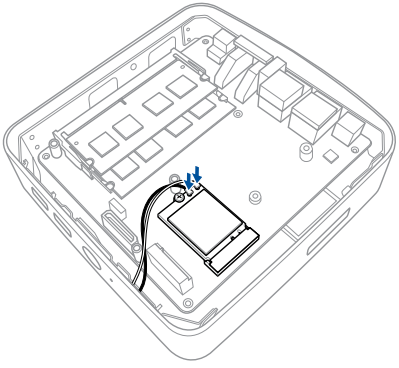


4. Align and insert the wireless card into the lower slot inside the VivoMini (A), then secure it with the bundled screw (B).

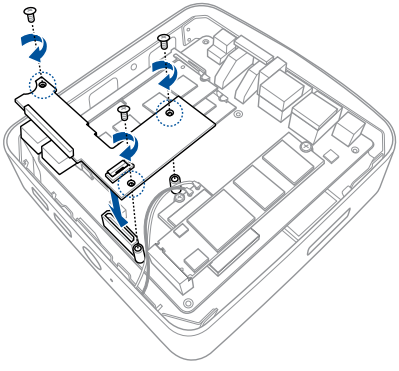


5. Connect the black antenna to MAIN or ▲ and the white antenna to AUX or △. Refer to the illustration for the right installation procedure.

NOTE: A soft clicking sound indicates that the antenna has been securely attached on the wireless card.



6. Replace the USB 3.1 Gen 1 expansion card and secure it using the three (3) screws removed previously

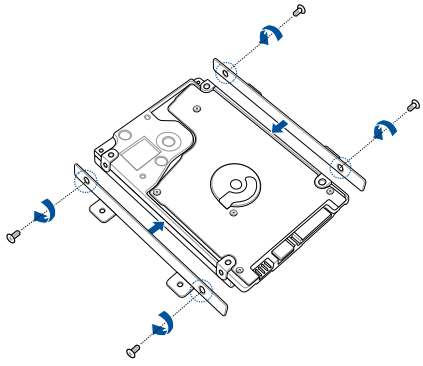


7. Follow steps 8-10 under the *Installing or upgrading memory modules* section to to replace the bottom cover back on your VivoMini.

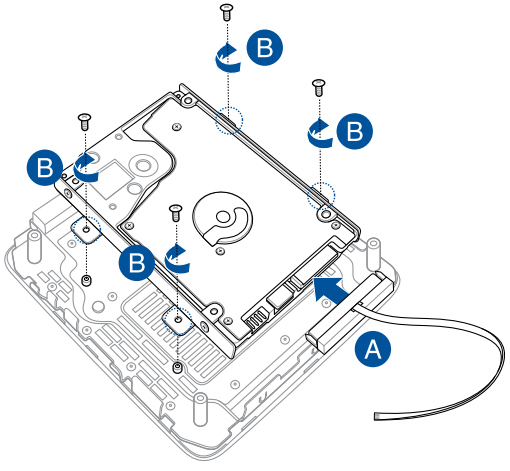
Installing the 2.5” HDD

To install the 2.5” HDD:

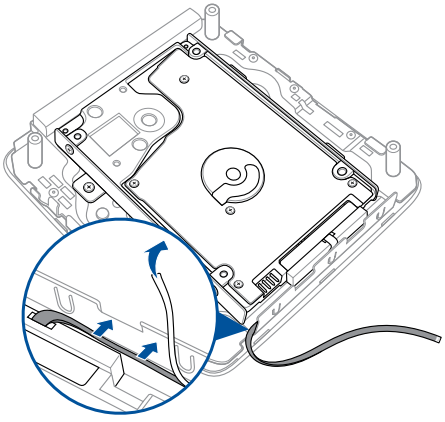
1. Follow steps 1-6 under the I*nstalling or upgrading memory modules* section to remove the bottom cover of your VivoMini.
2. Align the bundled bracket on each side of the HDD and insert four (4) screws to secure the 2.5” HDD to the bracket.



3. Connect the bundled HDD cable to the HDD (A), then secure the HDD and bracket to the bottom cover of your VivoMini using the four (4) bundled screws (B).



4. Remove the tape covering on the HDD cable and stick the cable to the bottom cover of your VivoMini as shown in the illustration below.



7. Follow steps 8-10 under the *Installing or upgrading memory modules* section to to replace the bottom cover back on your VivoMini.

Appendix

Safety information

Your VivoMini 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 VivoMini 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.

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.

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.

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 Class B digital apparatus complies with Canadian ICES-003, RSS-210, and CAN ICES-3(B)/NMB-3(B).

This device complies with Industry Canada license 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.

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

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003, RSS-210 et CAN ICES-3(B)/NMB-3(B).

Cet appareil est conforme aux normes CNR exemptes de licence d'Industrie Canada. Le fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

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

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.

ASUS contact information

ASUSTeK COMPUTER INC.

Address	No. 15, Li-Te Rd., Peitou, Taipei 112, Taiwan
Telephone	+886-2-2894-3447
Fax	+886-2-2890-7798
Web site	http://www.asus.com

Technical Support

Telephone	+886-2-2894-3447 (0800-093-456)
Online support	http://support.asus.com/techserv/techserv.aspx

ASUS COMPUTER INTERNATIONAL (America)

Address	800 Corporate Way, Fremont, CA 94539, USA
Telephone	+1-510-739-3777
Fax	+1-510-608-4555
Web site	http://usa.asus.com

Technical Support

Support fax	+1-812-284-0883
General support	+1-812-282-2787
Online support	http://support.asus.com/techserv/techserv.aspx

ASUS COMPUTER GmbH (Germany and Austria)

Address	Harkort Str. 21-23, D-40880 Ratingen, Deutschland
Fax	+49-2102-959991
Web site	http://www.asus.com/de

Technical Support

Telephone (DE)	+49-2102-5789555
Telephone (AT)	+43-820-240513
Support Fax	+49-2102-959911
Online support	http://support.asus.com/techserv/techserv.aspx

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

Manufacturer	ASUSTeK Computer Inc.	
	Tel:	+886-2-2894-3447
	Address:	4F, No. 150, LI-TE RD., PEITOU, TAIPEI 112, TAIWAN
Authorised representative in Europe	ASUSTeK Computer GmbH	
	Address:	HARKORT STR. 21-23, 40880 RATINGEN, GERMANY

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2. 1077(a)

Responsible Party Name: **Asus Computer International**

Address: **800 Corporate Way, Fremont, CA 94539.**

Phone/Fax No: **(510)739-3777/(510)608-4555**

hereby declares that the product

Product Name : VivoMini

Model Number : UN68U

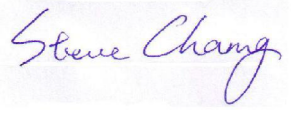
Conforms to the following specifications:

☒ FCC Part 15, Subpart B, Unintentional Radiators

Supplementary Information:

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

Representative Person's Name : **Steve Chang / President**



Signature :

Date : **Oct. 10, 2017**

Ver. 170324