VivoMini VC66 Series

User Manual

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

E12343
Revised Edition V2
December 2016

COPYRIGHT INFORMATION

LIMITATION OF LIABILITY

Circumstances may arise where because of a default on ASUS' part or other liability, you are entitled to recover damages from ASUS. In each such instance, regardless of the basis on which you are entitled to claim damages from ASUS, ASUS is liable for no more than damages for bodily injury (including death) and damage to real property and tangible personal property; or any other actual and direct damages resulted from omission or failure of performing legal duties under this Warranty Statement, up to the listed contract price of each product.

ASUS will only be responsible for or indemnify you for loss, damages or claims based in contract, tort or infringement under this Warranty Statement.

This limit also applies to ASUS' suppliers and its reseller. It is the maximum for which ASUS, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS ASUS LIABLE FOR ANY OF THE FOLLOWING: (1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES; (2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR (3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF ASUS, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY.

SERVICE AND SUPPORT

Visit our multi-language web site at **https://www.asus.com/support/**

Contents

About this manual

This manual provides information about the hardware and software features of your PC, 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: Upgrading your VivoMini

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

Appendix

This section includes notices and safety statements 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.

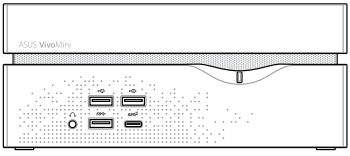
WARNING! This message contains important information that must be followed to keep you safe while performing certain tasks and prevent damage to your VivoMini's data and components.

Typography

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

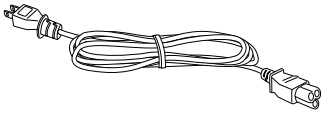
Package contents

Your VivoMini package contains the following items:

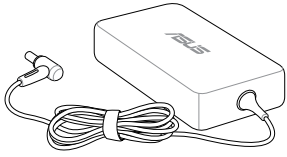


VivoMini

Technical documentations



Power cord*



AC power adapter*

NOTE:

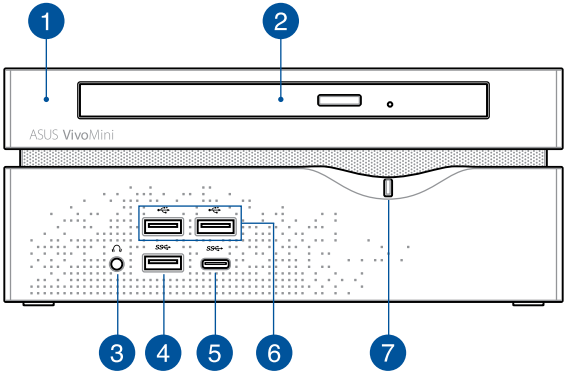
- *Actual product specifications and package contents may vary depending on the model type, country, or region.
- If the device or any of its components fail or malfunction during normal or proper use and it is still within the warranty period, bring the device and the warranty card to you nearest ASUS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

1

Getting to know your VivoMini

Features

Front panel



1 Top cover

The removable top cover allows you access to the hard disk drive and the memory modules.

> **IMPORTANT!** Before removing the top cover, turn off your VivoMini and unplug the power cable.

2 Optical Drive (on selected models)

Your VivoMini's optical drive may support several disc formats such as CDs, DVDs, recordable discs, or rewritable discs.

3 Headphone jack

This port allows you to connect amplified speakers or headphones.

4 USB 3.0 port

The USB 3.0 (Universal Serial Bus 3.0) port provides a transfer rate up to 5 Gbit/s and is backward compatible to USB 2.0.

5 **USB 3.0 Type-C port**

This USB Type-C (Universal Serial Bus Type-C) port provides a maximum of 1.5A output current, transfer rate of up to 5 Gbit/s, and is backward compatible to USB 2.0.

> **NOTE:** The Type C port has a reversible-plug connector.

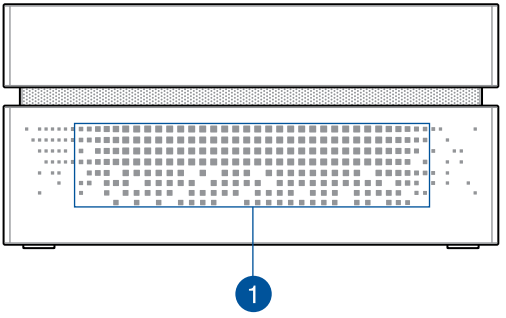
6 **USB 2.0 port**

The USB (Universal Serial Bus) port is compatible with USB 2.0 or USB 1.1 devices such as keyboards, pointing devices, flash disk drives, external HDDs, speakers, cameras and printers.

7 **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.

Left side

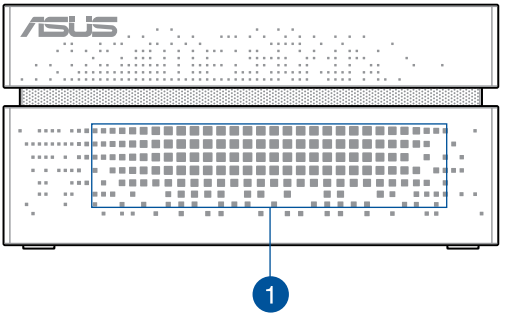


1 **Air vents**

The air vents allow air to enter your VivoMini chassis.

IMPORTANT! For optimum air flow, ensure that the air vents are free from obstructions.

Right side

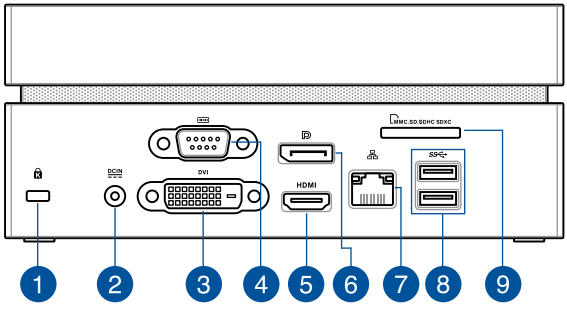


1 **Air vents**

The air vents allow air to enter your VivoMini chassis.

IMPORTANT! For optimum air flow, ensure that the air vents are free from obstructions.

Rear panel



1 Kensington® security slot

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

2 DCIN Power input

The bundled 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 or hot when in use. Do not cover the adapter and keep it away from your body.

3 DVI DVI port

This port allows you to connect your VivoMini to an external display.

4 Serial (COM) connector

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

5 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.

6 **DisplayPort**

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

7 **LAN port**

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

8 SS **USB 3.0 port**

The USB 3.0 (Universal Serial Bus 3.0) port provides a transfer rate up to 5 Gbit/s and is backward compatible to USB 2.0.

9 **Memory card slot**

This built-in memory card reader slot supports MMC, SD, SDHC, and SDXC card formats.

2

Using your VivoMini

Getting started

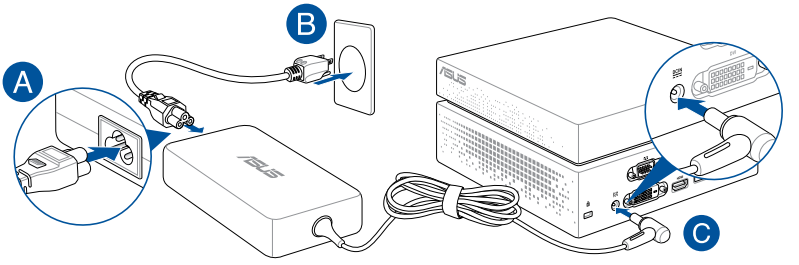
Connect the AC power adapter to your VivoMini

To connect the AC power adapter to your VivoMini:

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

B. Plug the AC power adapter into a 100V~240V power source.

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



IMPORTANT!

- We strongly recommend that you use only the AC power cord 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.
- Power adapter information:

  - Input voltage: 100-240Vac

  - Input frequency: 50-60Hz

  - Rating output current: 6.32A max. (120W) / 9.23A max. (180W)

  - Rating output voltage: 19V / 19.5V

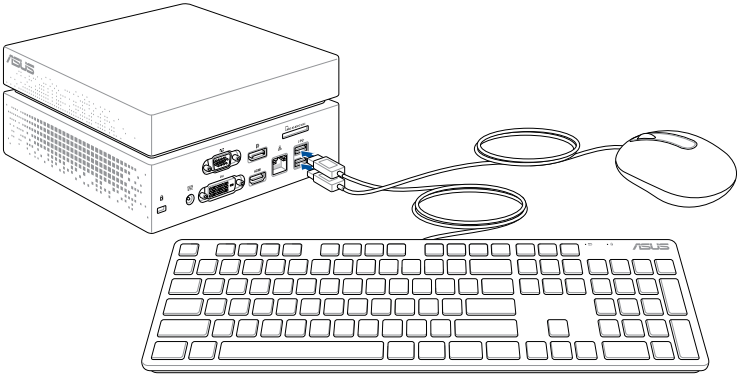
Connect the USB cable from keyboard or mouse

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.

Connecting keyboard or mouse via USB port



Connect a display panel to your VivoMini

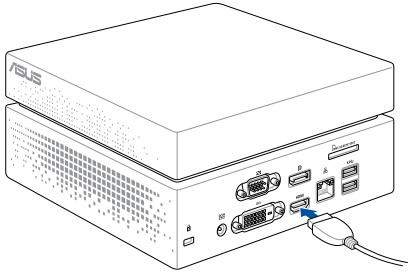
You can connect a display panel or projector to your VivoMini that has the following connectors:

- HDMI connector
- DisplayPort connector
- DVI connector

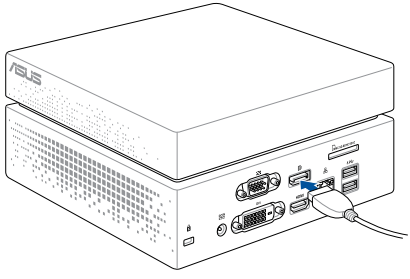
To connect a display panel to your VivoMini:

Connect a display cable either to the HDMI, DisplayPort or DVI port.

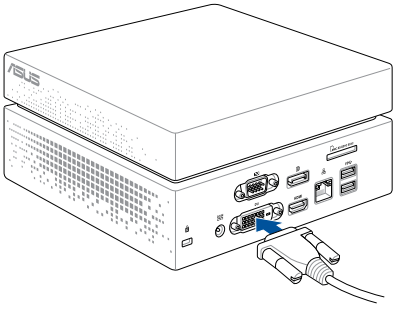
Connecting display via HDMI port



Connecting display via DisplayPort

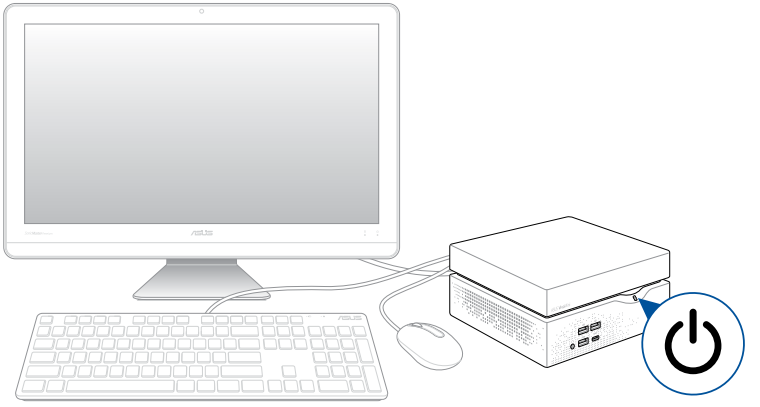


Connecting display via DVI port



Turn on your VivoMini

Press the power button to turn on your VivoMini.



Turning your VivoMini off

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 PC 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.

Load default BIOS settings

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

- Enter the BIOS by following the steps mentioned in the *Quickly enter the BIOS* section.
- Navigate to the **Exit** menu.
- Select the **Load Optimized Defaults** option, or you may press <F5>.
- Select **Yes** to load the default BIOS values.

3

Upgrading your VivoMini

Upgrading memory modules

Your VivoMini comes with two SO-DIMM memory slots that allow you to install two 2GB, 4GB, 8GB, or 16GB unbuffered non-ECC 1.35 V DDR4 260-pin SO-DIMMs for a maximum of 32GB memory.

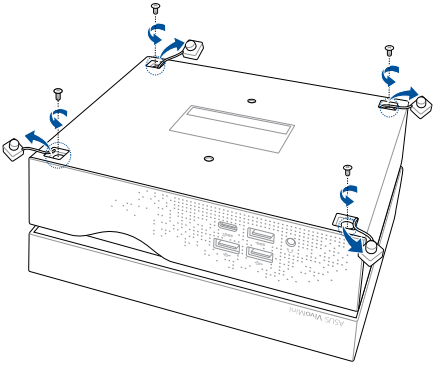
IMPORTANT! Refer to http://www.asus.com for the list of compatible DIMMs. You can only install 1.35 V DDR4 SO-DIMM to the VivoMini's DIMM slots.

NOTE: The illustrations in this section are for reference only and may vary per model.

To install or upgrade the memory modules:

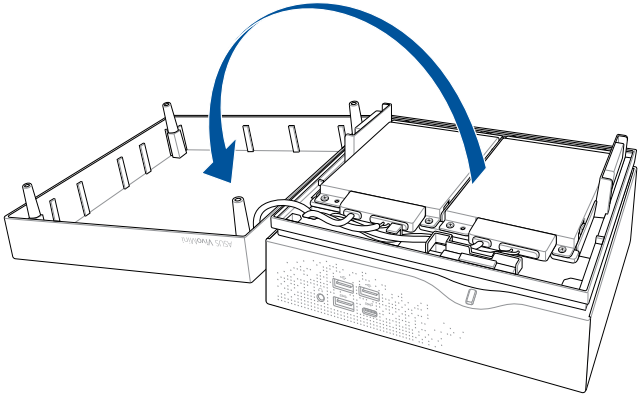
1. Turn off your VivoMini then disconnect all cables and peripherals.
2. Place the VivoMini on a flat stable surface, with its bottom side facing up.
3. Using a flat-head screwdriver or straightened paper clip, remove the rubber feet from the sockets, then remove the four (4) screws securing the top cover.

IMPORTANT! The rubber covers are designed to be attached to the bottom side. DO NOT force to detach it or completely remove it from the compartment cover.

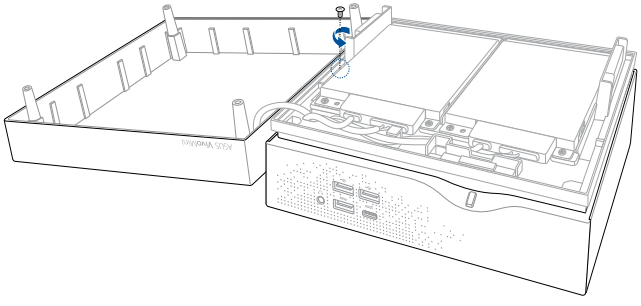


4. Lift and remove the top cover and set it aside.

IMPORTANT! Remove the top cover carefully to prevent pulling on and causing damage to the cables connected. This may vary per model.

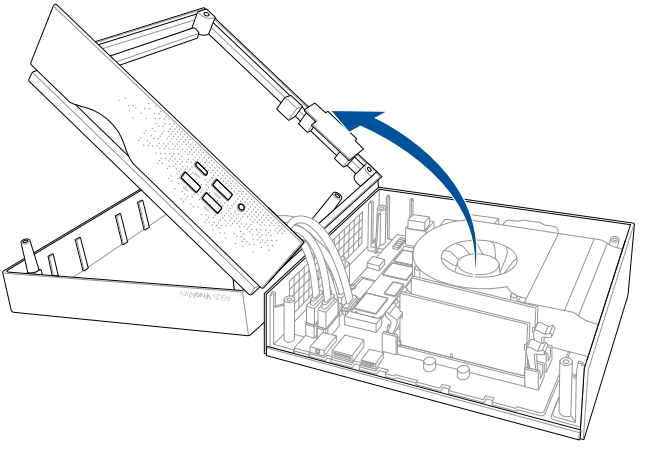


5. Remove the screw from the HDD layer.

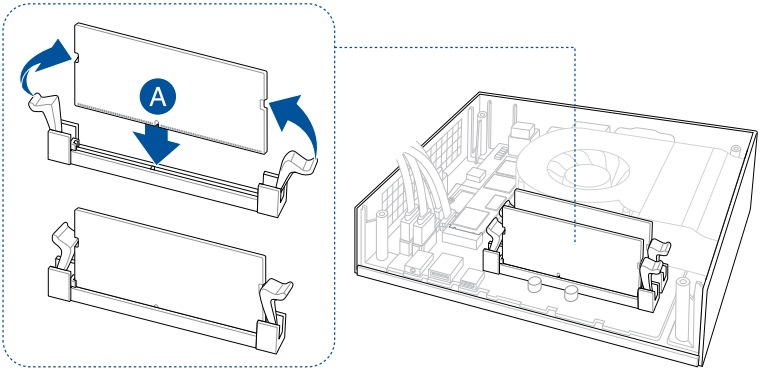


6. Lift open the HDD layer.

IMPORTANT! Lift the HDD layer carefully to prevent pulling on and causing damage to the cables connected.

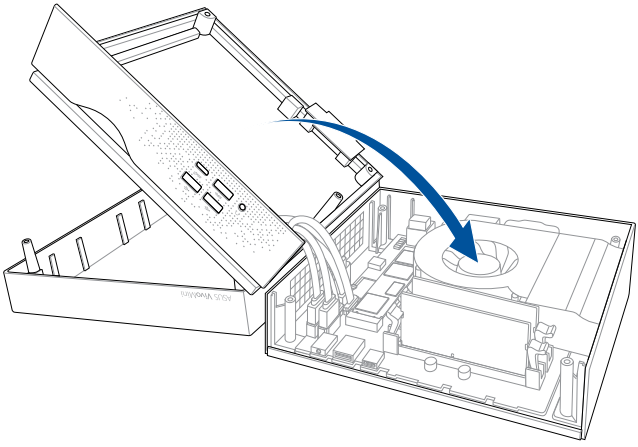


7. Align and insert the memory module into the slot and press it down (A) until the retaining clips snaps back into place and it is securely seated in place. Repeat the same steps to install the other memory module.

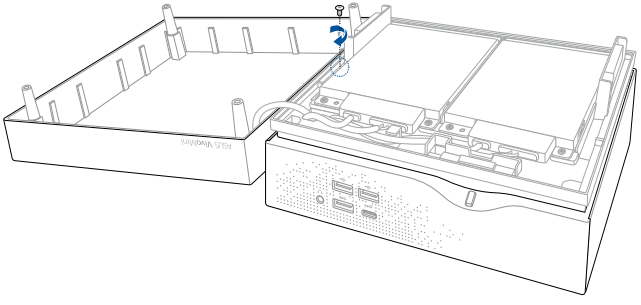


8. Replace the HDD layer.

NOTE: Ensure to organize the cables to prevent any damage to your VivoMini and to ensure the HDD layer can be replaced successfully.

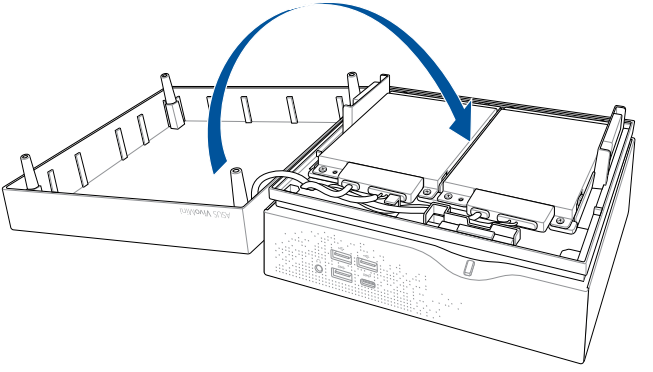


9. Replace the screw to secure the HDD layer.

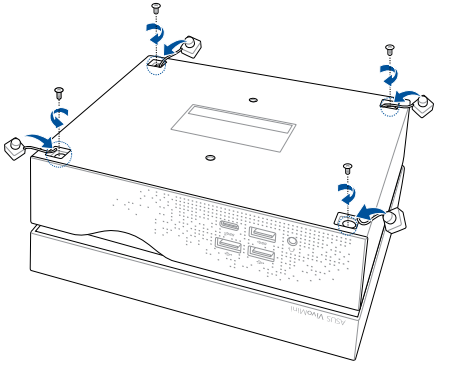


10. Replace the top cover of your VivoMini

NOTE: Ensure to organize the cables to prevent any damage to your VivoMini and to ensure the top cover can be replaced successfully.



11. 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.



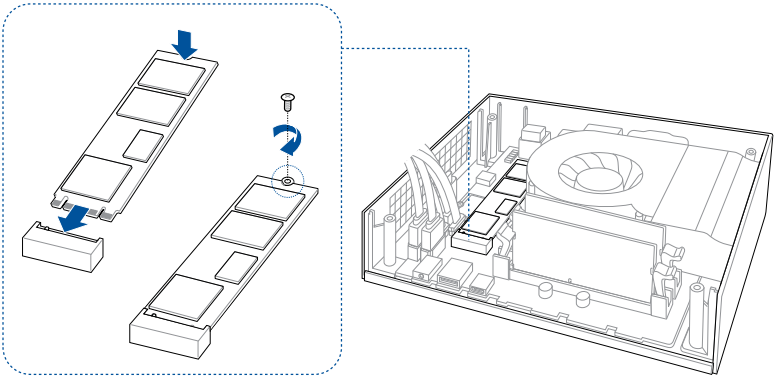
Installing or upgrading the M.2 SSD

NOTE: The illustrations in this section are for reference only and may vary per model.

Your VivoMini includes a M.2(NGFF) slot that supports a M.2 2280 SSD.

To install or upgrade the M.2 SSD:

1. Follow steps 1-6 under the *Upgrading memory modules* section to remove the top cover and HDD layer of your VivoMini.
2. Align and insert the M.2 SSD into its slot inside the VivoMini, then secure it with a screw.



3. Follow steps 8-11 under the *Upgrading memory modules* section to replace the top cover and HDD layer of your VivoMini.

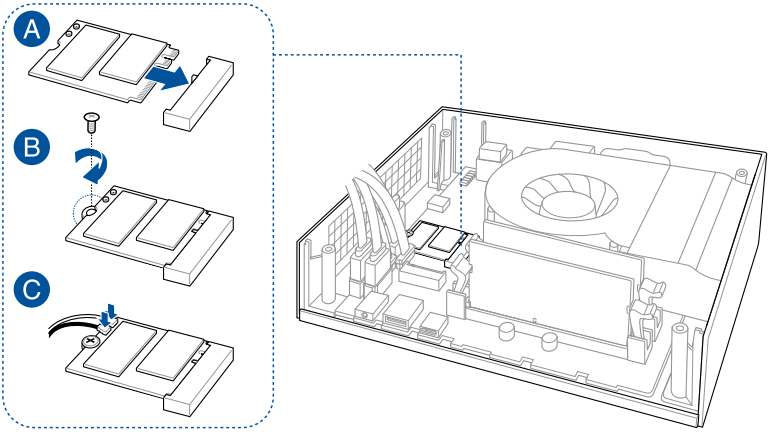
Installing or upgrading the wireless card

NOTE: The illustrations in this section are for reference only and may vary per model.

Your VivoMini includes a M.2(NGFF) slot that supports a M.2 2230 wireless and bluetooth module.

To install or upgrade a wireless card:

1. Follow steps 1-6 under the *Upgrading memory modules* section to remove the top cover and HDD layer of your VivoMini.
2. Align and insert the wireless card into its slot inside the VivoMini (A), then secure it with a screw (B).
3. Connect the black antenna to MAIN or ▲ and the white antenna to AUX or △ on the wireless card (C).



4. Follow steps 8-11 under the *Upgrading memory modules* section to replace the top cover and HDD layer of your VivoMini.

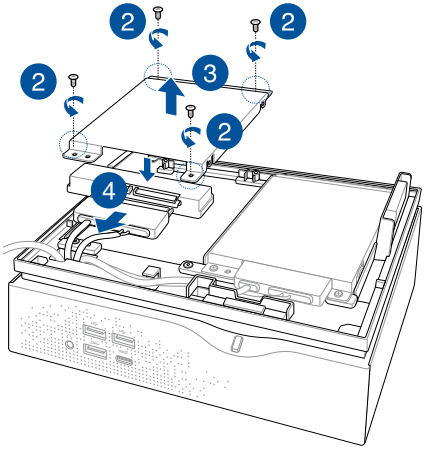
Installing 2.5” HDD / SSD

NOTE:

- The illustrations in this section are for reference only and may vary per model.
- This bay supports 7mm/9.5mm 2.5” HDDs/SSDs.
- Some models may only support one (1) HDD/SSD.

To install or upgrade the HDD / SSD:

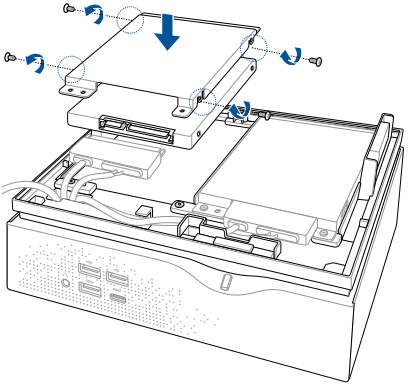
1. Follow steps 1-4 under the *Upgrading memory modules* section to remove the top cover of your VivoMini.
2. Remove four (4) screws from the HDD/SSD bracket.
3. Remove the HDD/SSD bracket.
4. Remove the cable from the holder, then remove the holder from the HDD/SSD bracket.



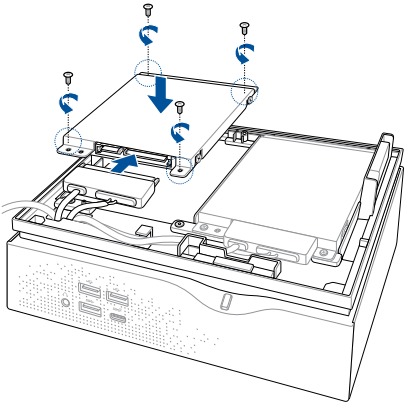
NOTE:

- Ensure to remove the holder from the bracket when installing an HDD/SDD to the bracket.
- The availablility of the holder may vary depending on the model type, country, or region.

5. To install a new HDD/SSD, secure the HDD/SSD to the bracket using the bundled four (4) screws.



6. Connect the cable to the HDD/SSD, then align the bracket to the HDD/SSD compartment of your VivoMini and secure the bracket with the screws previously removed.



7. Follow steps 10-11 under the *Upgrading memory modules* section to replace the top cover of 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.

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-Metal 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.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.

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.

CE Mark

CE

For product without non-harmonized band, use CE

CE !

For product with non-harmonized band, use CE!

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 Malaysia

Regional notice for California

WARNING! This product may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

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	4F, No. 150, 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	+86-21-3842-9911
Fax	+86-21-5866-8722, ext. 9101#
Online support	http://qr.asus.com/techserv

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://qr.asus.com/techserv

ASUS COMPUTER GmbH (Germany and Austria)

Address	Harkort Str. 21-23, D-40880 Ratingen, Germany
Fax	+49-2102-959931
Web site	http://www.asus.com/de
Online contact	http://eu-rma.asus.com/sales

Technical Support

Telephone	+49-2102-5789555
Support Fax	+49-2102-959911
Online support	http://qr.asus.com/techserv

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 : VC66,VC66R

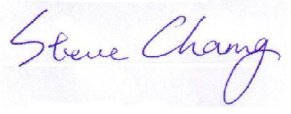
Conforms to the following specifications:

☒ 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 : **Dec. 24, 2016**

Ver. 140331