

ZOTAC

ZBOX

USER'S MANUAL

MAGNUS EN173070C/EN153060C

E SERIES

ZOTAC ZBOX

User's Manual



No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ZOTAC.

Products and corporate names mentioned in this manual may be registered trademarks or copyrights of their respective companies, and are used for identification purposes only. All trademarks are the property of their respective owners.

Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

CAUTION:

Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

Table of Contents

Product Specifications	3
Safety information	4
Setting up your system	4
Care during use	4
Welcome	5
Package contents	5
Getting to know your ZOTAC ZBOX	6
Front view	6
Rear view	7
Installing Hardware inside ZOTAC ZBOX	8
Installing a memory module	9
Removing the memory module	10
Installing a storage drive	11
Installing M.2 SSD module	13
Installing Optane memory module	14
Setting up your ZOTAC ZBOX	15
Installing drivers and software	17
Installing an operating system	17
Installing system drivers	17
Installing Killer Control Center	19
Using your ZOTAC ZBOX	23
Configuring a wireless connection	23
Configuring audio output	23
Intel® Optane™ technology	24
Enabling VMD controller and VMD Global Mapping in BIOS settings	24
Installing the OS	26
Enabling Intel® Optane™ memory	28
Disabling Intel® Optane™ memory	33

Product Specifications

❑ Microprocessor support

- ❖ Intel Core i7-11800H (8-core, 2.3 GHz, up to 4.6 GHz) for ZBOX EN173070C series
- ❖ Intel Core i5-11400H (6-core, 2.7 GHz, up to 4.5 GHz) for ZBOX EN153060C series

❑ Chipset

- ❖ Intel HM570

❑ Onboard Graphics support

- ❖ NVIDIA® GeForce RTX™ 3070 Laptop GPU for ZBOX EN173070C series
 - Up to 1620MHz Boost Clock, 125W Maximum Graphics Power
 - 8 GB GDDR6 VRAM
- ❖ NVIDIA® GeForce RTX™ 3060 Laptop GPU for ZBOX EN153060C series
 - Up to 1702MHz Boost Clock, 115W Maximum Graphics Power
 - 6 GB GDDR6 VRAM
- ❖ Two HDMI 2.1, two DP 1.4a

❑ Operating systems:

- ❖ Windows 11 Ready

❑ System Memory support

- ❖ Two DDR4-3200/2933 SODIMM slots
- ❖ Up to 64 GB of memory

❑ USB Ports

- ❖ Five USB 3.1 10Gbps
- ❖ One Thunderbolt 4

❑ Onboard Serial ATA

- ❖ SATA 6.0 Gb/s transfer rates
- ❖ Support one 2.5-inch SATAIII HDD or SSD (max 9.5mm height)

❑ Expansion slot

- ❖ One M.2 PCIe x4 slot (22/30, 22/42, 22/80)
- ❖ One M.2 PCIe x4/ SATA SSD/ Intel Optane Memory (22/30, 22/42, 22/80)

❑ Onboard Dual LAN

- ❖ 1 x Killer E3100X 2.5Gbit LAN (10/100/1000/2500Mbps)
- ❖ 1 x 10/100/1000 Mbps Ethernet

❑ WiFi 6/Bluetooth support

- ❖ Killer WiFi 802.11 ax
- ❖ Bluetooth 5

❑ Power

- ❖ 19.5V/330W AC-DC Power adapter

❑ Product Size

- ❖ 210mm x 203mm x 62.2mm

Safety information

Your ZOTAC ZBOX 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 operating your system.
- ❖ Do not use this product near water or a heat source such as a radiator.
- ❖ Set up the system on a stable surface with the provided stand. Never use the system alone without the stand.
- ❖ 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.

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 all power, modem, and network cables 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.

Welcome

Congratulations on your purchase of the ZOTAC ZBOX. The following illustration displays the package contents of your new ZOTAC ZBOX. If any of the below items are damaged or missed, contact your retailer.

Package contents

- 1 x ZOTAC ZBOX
- 1 x AC Adapter
- 1 x Power Cord
- 2 x Antenna
- 1 x USB flash drive with OS drivers
- 1 x Quick Start Guide



Getting to know your ZOTAC ZBOX

Front view



Refer to the diagram below to identify the components on this side of the system

1. Power switch

The power switch allows powering ON and OFF the system.

2. USB 3.1 port

The USB 3.1 port supports the SuperSpeed USB 3.1 devices and is backwards compatible with USB 3.0/2.0/1.1 devices. Use this port for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

3. Thunderbolt 4 port

The Thunderbolt 4 port is compatible with USB Type-C devices and provides a transfer rate of up to 40 Gbit/s for Thunderbolt 4 devices, but does not support display output.

4. Memory card slot

The Memory card slot is compatible with SD/SDHC/SDXC cards used in devices like digital cameras, MP3 players, mobile phones and PDAs.

5. Power LED

The Power LED is always ON when power is on.

6. WiFi LED

The WiFi LED is always ON when WiFi was active.

7. Hard disk LED

The hard disk LED blinks when data is being written into or read from the hard disk drive.

8. Microphone jack

The microphone jack is designed to connect the microphone used for video conferencing, voice narrations or simple audio recordings.

9. Headphone/Audio Out jack

The stereo headphone jack (3.5mm) is used to connect the system's audio out signal to amplified speakers or headphones.

Rear view



Refer to the diagram below to identify the components on this side of the system.

1. Power input (DC19.5V)

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

2. LAN ports

The eight-pin RJ-45 LAN ports support standard Ethernet cables for connection to a local network. The LAN port marked with K is for Killer Ethernet.

3. WiFi antenna connectors

The WiFi antenna connector supports WiFi antenna module.

4. DisplayPorts

DisplayPort supports both external (box-to-box) and internal (laptop LCD panel) display connections.

5. HDMI ports

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

6. USB 3.1 port

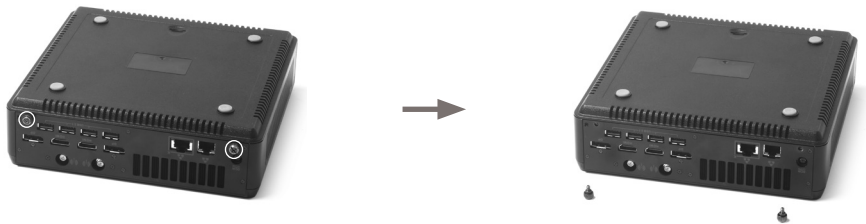
The USB 3.1 port supports the SuperSpeed USB 3.1 devices and is backwards compatible with USB 3.0/2.0/1.1 devices. Use this port for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

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

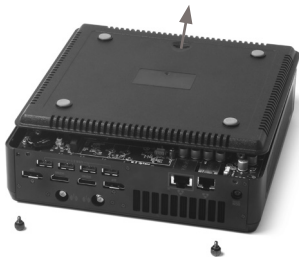
Installing Hardware inside ZOTAC ZBOX

Before installing hardware, please follow the instructions below to remove the cover of your ZOTAC ZBOX.

1. Remove the two rear thumb screws.

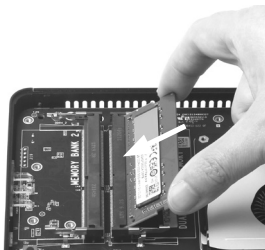


2. Gently remove the cover as shown below.

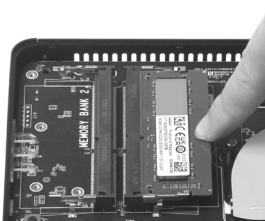


Installing a memory module

1. Locate the SO-DIMM memory slots and insert a SO-DIMM memory module into the slot at a 45 degree angle.



2. Gently press down on the memory module until it locks into place by the arms of the memory slot.

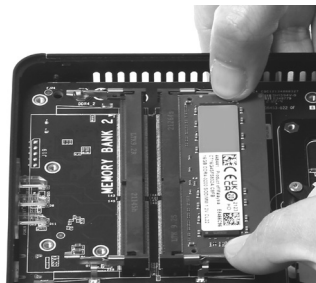


Note:

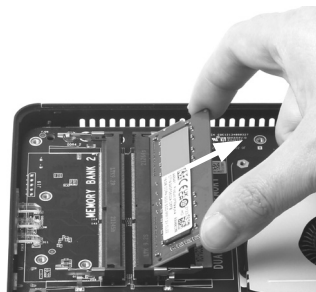
1. This ZOTAC ZBOX accommodates two DDR4 SO-DIMM memory modules. You must install at least one module for the system to function.
2. 16GB DDR4 memory is pre-installed in Windows version.

Removing the memory module

1. Locate the SO-DIMM memory slot and gently press the two arms securing the memory module outwards, as shown in the image below, to release the memory module.



2. Remove the memory module from the slot at a 45-degree angle.

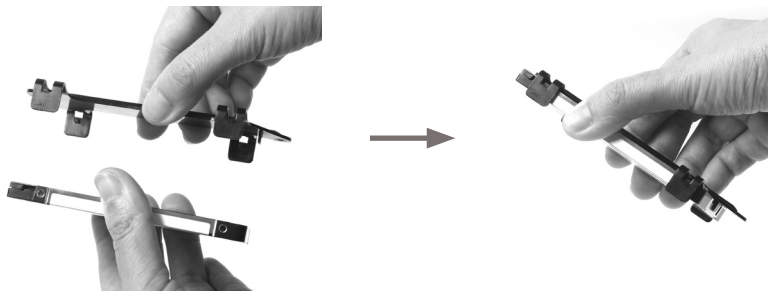


Installing a storage drive

1. Locate the 2.5-inch storage drive and storage drive bracket.



2. Install the storage drive to the storage drive bracket.



3. Insert the storage drive into the slot at a 45 degree angle and gently slide into the connector.



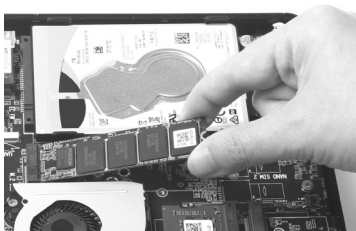
4. Secure the installed drive with a thumb screw.



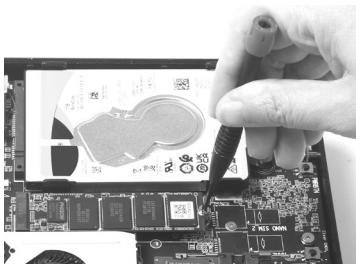
*1TB hard disk drive is pre-installed in Windows version.

Installing M.2 SSD module

1. Locate the M.2 SSD slot and insert an M.2 SSD module into the slot at a 45 degree angle.



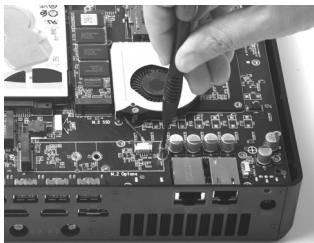
2. Gently press down on the M.2 SSD module, and install the screw.



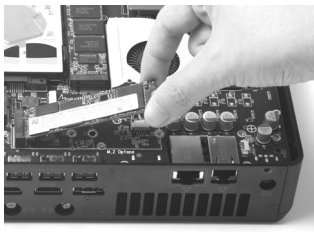
*512GB M.2 SSD is pre-installed in Windows version.

Installing Optane memory module

1. Locate the Optane memory slot and remove the screw from the bolt.



2. Insert an Optane memory module into the slot at a 45 degree angle.



3. Gently press down on the Optane memory module, and install the screw.



Setting up your ZOTAC ZBOX

You need to connect peripherals before using your ZOTAC ZBOX.



1. Connecting to a network device

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a hub or switch. The LAN port marked with K is for Killer Ethernet.

2. Connecting a WiFi antenna module

Connect a BT/WiFi antenna module to the BT/WiFi antenna connector.

3. Connecting to DisplayPort displays

Connect the DisplayPort connectors to the DP port of the monitor or display.

4. Connecting to HDMI displays

Connect one end of an HDMI cable to the HDMI port on the system rear panel and the other end to a HDMI-compatible display such as an HDTV or monitor.

5. Connecting to USB 3.1 devices

Connect USB 3.1 devices such as external hard drives, SSDs and flash drives to the USB 3.1 port on the system rear panel.

6. Turning on the system

Connect the supplied AC adapter to the DC IN jack on the system rear panel and then press the power switch on the front panel to turn on the system.

- ☞ When your ZOTAC ZBOX is not in use, unplug the power adapter or switch off the AC outlet to save on power consumption.

Installing drivers and software

Installing an operating system

The ZOTAC ZBOX does not ship with an operating system preinstalled. The user must install the operating system before the ZOTAC ZBOX can be used. The following operating systems are supported:

- Windows 11 Ready

Follow the instructions below to install an operating system:

1. Attach external USB flash drive via USB 3.1 ports.
2. Wait for the ZOTAC ZBOX to boot from the drive.
3. Follow the onscreen directions to install the operating system.
4. Install system drivers to gain full functionality of the ZOTAC ZBOX hardware and features.

Installing system drivers

Before you can use the full features of the ZOTAC ZBOX, the system drivers must be installed. The following types of operating systems are supported by the ZOTAC ZBOX USB flash drive:

- Windows 11 Ready

Follow the instructions below to install the system drivers:

1. Insert the ZOTAC ZBOX USB flash drive. If autorun is enabled, the driver installation main menu will show up automatically. If autorun is disabled, you may click the file Launch.EXE to bring up the driver installation main menu.
2. The following drivers are available on the USB flash drive:
 - Intel Chipset Driver
 - NVIDIA Graphics Driver
 - Intel Graphics Driver
 - Intel Ethernet PCI-E Driver
 - Wireless Network Driver



- Bluetooth Driver
- Intel Management Engine
- Thunderbolt
- Intel(R) HID Event Filter
- BayHub_SD Driver

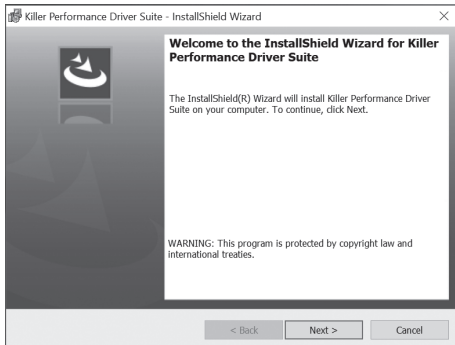
☞ Each driver must be installed individually to ensure proper operation of the ZOTAC ZBOX.

3. Select the driver you want to install. The driver installer should launch.
4. Follow the onscreen instructions to install the drivers.
5. Restart the system.

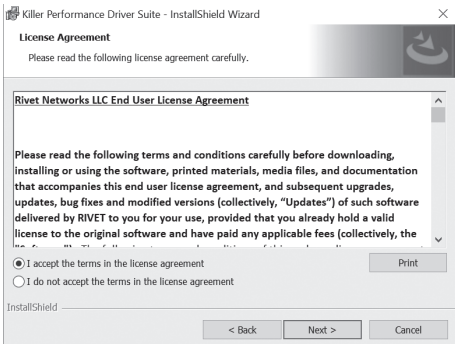
Installing Killer Control Center

Before you can use the full feature of Killer Lan, please follow the instructions below to install the Killer Control Center.

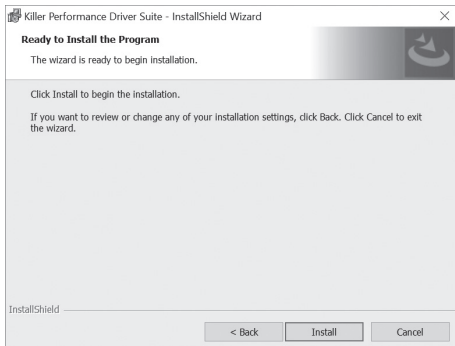
1. Run Killer Wireless Network Driver, click “Next” when the following dialog box displays.



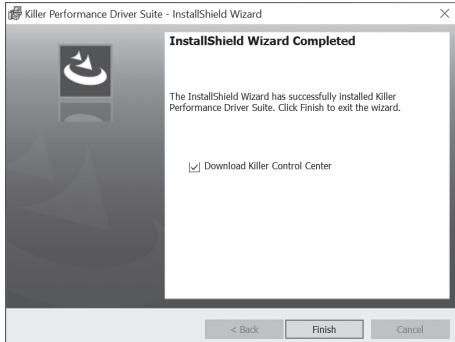
2. Accept the License agreement.



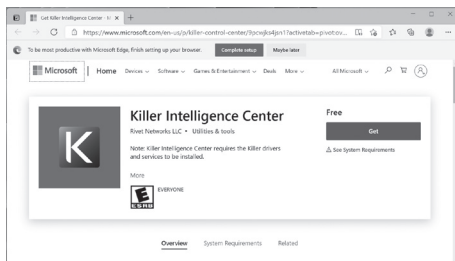
3. Click "Install" to begin the installation. (Please make sure that the network is connected before the installation)



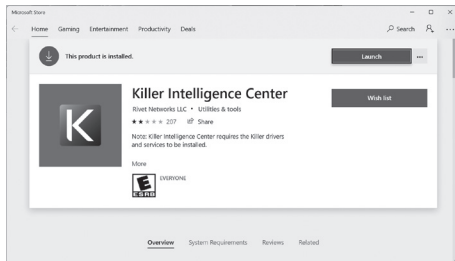
4. Check before "Download Killer Control Center", and click "Finish".



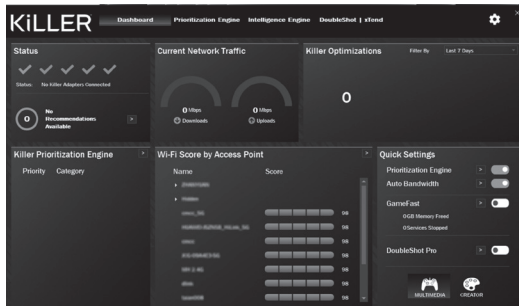
5. Click “Get” to download the Killer Control Center.



6. When the installation is complete, click “Launch” to run the Killer Control Center.





7. Killer Control Center displays as below.

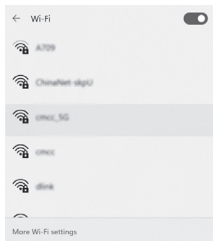


Using your ZOTAC ZBOX

Configuring a wireless connection



Please follow the instructions below to connect to a wireless network:

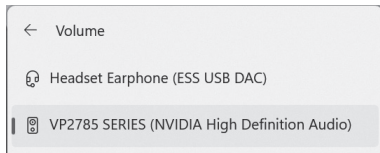
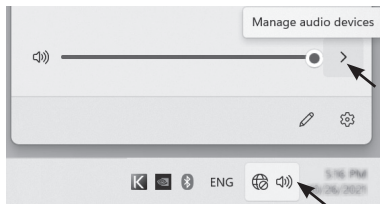
1. Click the icon  on the right of wireless network icon .
2. Select the wireless network you want to connect to from the list.
Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.



Configuring audio output

Follow the steps below to enable audio output when connecting the ZOTAC ZBOX to a TV or receiver via DP/HDMI adapter.

1. Click the audio icon  in the notification area.
2. Click the icon  to manage audio devices.
3. Under Volume devices, click the display device that corresponds with your audio compatible display.
Note 2: Enter the network security key if necessary.



Intel® Optane™ technology

Intel® Optane™ is a new ultra-high-speed memory technology with 3D XPoint™ memory media, compatible with NVMe storage protocol.

The program SetupOptaneMemory.exe is included in the USB flash drive (X:\OptaneMemory\SetupOptaneMemory.exe).

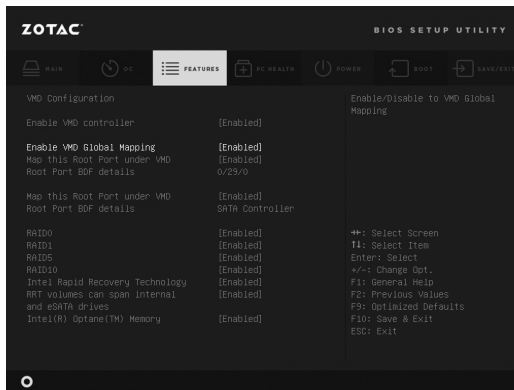
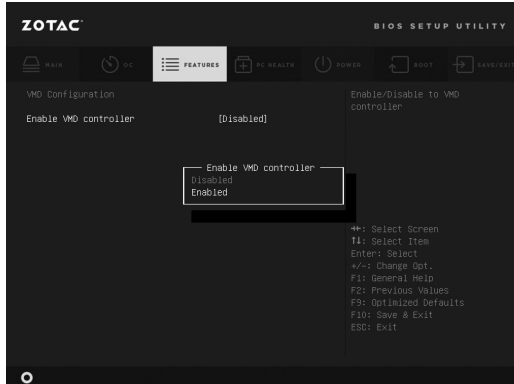
Enabling VMD controller and VMD Global Mapping in BIOS settings

Before using Intel Optane memory, please follow the recommended procedure to enable VMD controller and VMD Global Mapping in BIOS SETUP UTILITY, as listed below.

1. Turn on the ZOTAC ZBOX and press <Delete> to enter the BIOS SETUP UTILITY.
2. Use the arrow keys to navigate to the **FEATURES** menu, select **VMD setup menu** and press <Enter>.



3. Change the status of **Enable VMD controller** and **Enable VMD Global Mapping** to **Enabled**.

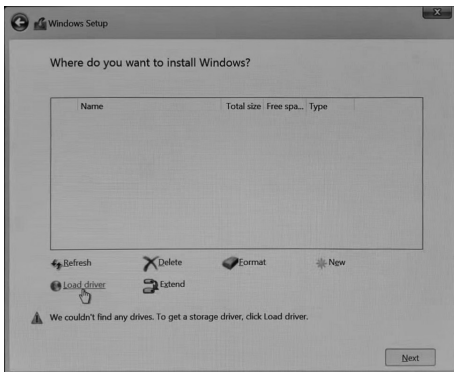


4. Press F10 to save the configuration and exit.

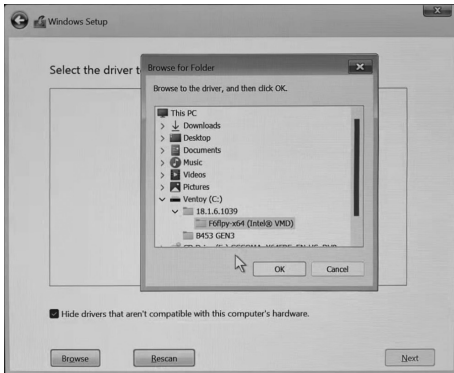
Installing the OS

During OS installation process, users should install the proper floppy VMD driver.

1. When the Windows Setup displays, click "Load driver".



2. Browse and select the driver.





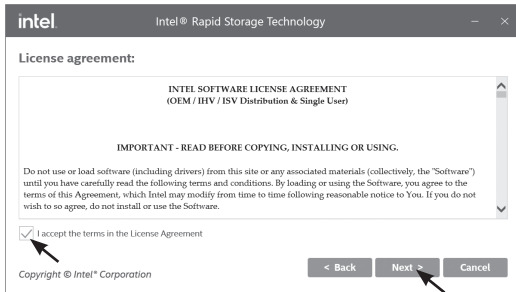
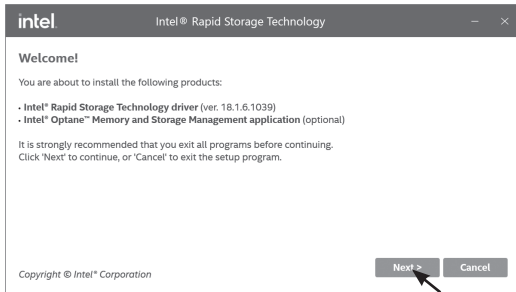
3. Click "Next" to complete the installation.

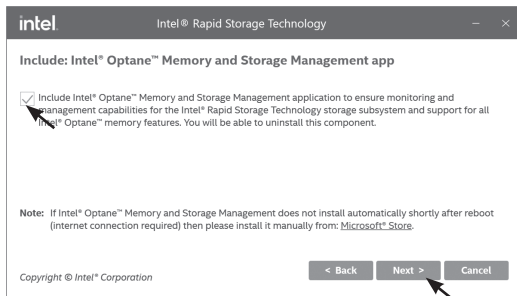
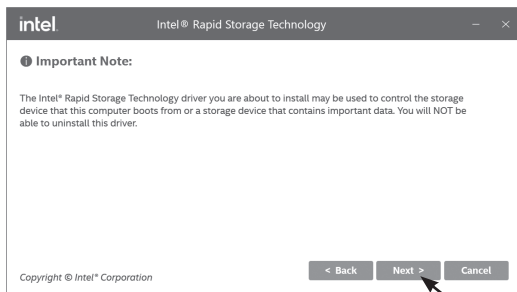


Enabling Intel® Optane™ memory

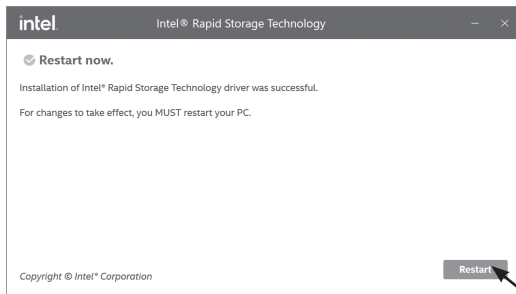
Please follow the recommended procedure to enable Optane memory, as listed below. (X: your driver DVD/ USB flash drive letter)


1. Locate and open the file OptaneMemory in the driver DVD/ USB flash drive, double-click SetupOptaneMemory.exe to run.
2. Follow the pictures below to complete the installation.

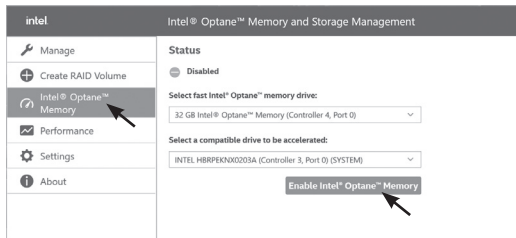




3. Restart the system.



4. When the installation is complete, click the Intel icon  in the notification area.
5. Under Intel® Optane™ Memory and Storage Management, click "Intel® Optane™ Memory" and "Enable Intel® Optane™ Memory".



6. Choose mode for Intel Optane Memory.

intel Intel® Optane™ Memory and Storage Management

Manage

Create RAID Volume

Intel® Optane™ Memory

Performance

Settings

About

Choose mode for Intel® Optane™ Memory

Please select mode in which your Intel® Optane™ Memory Volume will be created:

Performance Mode:
This mode is recommended to enhance the performance of the selected storage drive.
Note: Manual pinning of files/folders/applications to Intel® Optane™ memory is not available in this mode.

Responsiveness Mode:
This mode is recommended to use manual pinning of files/folders/applications to Intel® Optane™ memory.

For more information visit:
<https://www.intel.com/support/optane-memory>

Back Next

7. Check "Erase all data on Intel® Optane™ memory module" and click "Enable".

intel Intel® Optane™ Memory and Storage Management

Manage

Create RAID Volume

Intel® Optane™ Memory

Performance

Settings

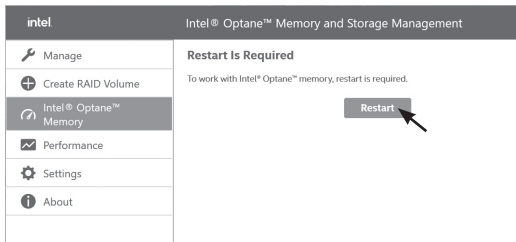
About

Restart Is Required

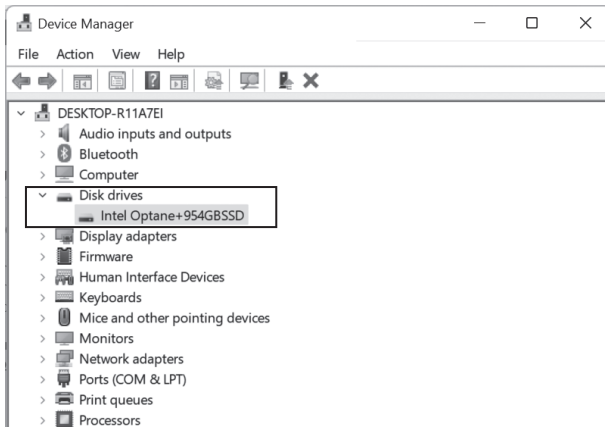
To work with Intel® Optane™ memory, restart is required.

Restart


8. Click “Restart” to complete enabling the Optane Memory.

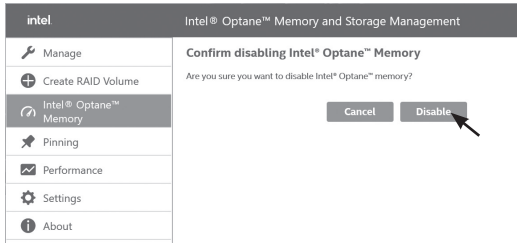
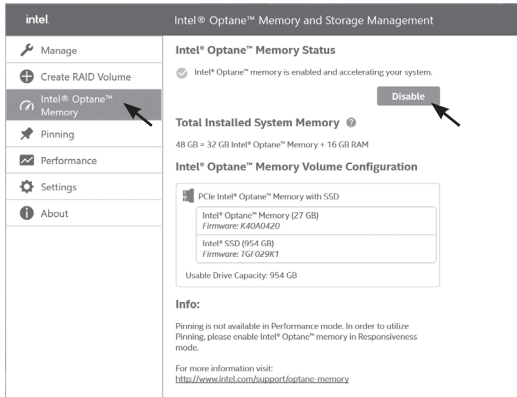


9. When the Optane Memory is successfully enabled, the created Intel® Optane™ information will show in Device Manager > Disk drives.

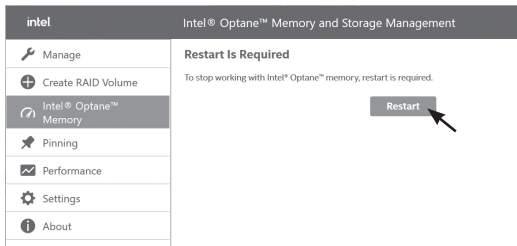


Disabling Intel® Optane™ memory

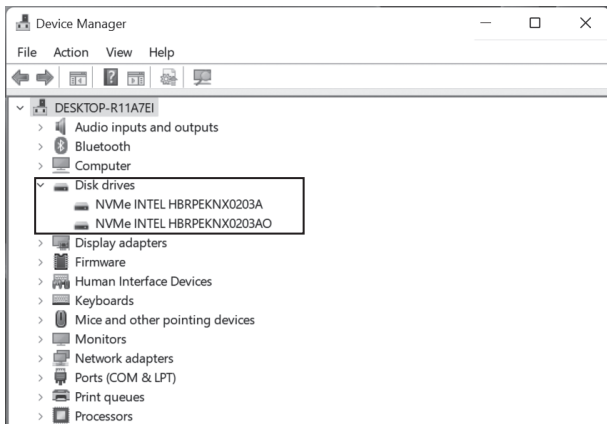
1. Click the Intel icon  in the notification area.
2. Under Intel® Optane™ Memory and Storage Management, click “Intel® Optane™ Memory” and “Disable”.




- Click "Restart" to complete disabling the Optane Memory.



- When the Optane Memory is successfully disabled, the disabled Intel® Optane™ information will show in Device Manager > Disk drives.



EMPOWER THE FUTURE

-  facebook.com/zotac
-  twitter.com/zotac
-  youtube.com/zotacofficial
-  vimeo.com/zotac
-  instagram.com/zotac_official



209-MB453-02V9F



ZOTAC.COM