

**PUSH
YOUR
SKILL**

GO TO ➔

ZOTAC-CUP.COM

ZOTAC[®]
ZOTAC.COM

THE **ORIGINAL**
MINI PC



facebook.com/zotac



twitter.com/zotac



youtube.com/zotacofficial



vimeo.com/zotac



291-MB359-01Q8F



USER'S MANUAL

ZOTAC
ZBOX
MI553

M 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 not 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 the ZOTAC ZBOX	8
Installing a memory module	9
Removing a memory module	10
Installing a hard disk drive	11
Installing M.2 SSD module	13
Installing Optane memory / M.2 SSD module	14
Setting up your ZOTAC ZBOX	15
Positioning the ZOTAC ZBOX	17
Mounting the ZOTAC ZBOX to an LCD monitor	17
Installing drivers and software	19
Installing an operating system	19
Installing system drivers	19
Using your ZOTAC ZBOX	20
Configuring a wireless connection	20
Configuring audio output	21
Intel® Optane™ technology	22
Enabling Intel® Optane™ memory	22
Disabling Intel® Optane™ memory	29

Product specifications

- ❑ **Microprocessor support**
 - ❖ Intel Core i5-7300HQ (dual core 2.5 GHz, up to 3.5 GHz)
- ❑ **Operating systems:**
 - ❖ Windows 10 64-bit
- ❑ **System Memory support**
 - ❖ Two 260-pin SO-DIMMs DDR4 up to 2400 Mbps (Up to 32GB)
- ❑ **USB Ports**
 - ❖ One USB 3.1 Type-C port, one USB 3.1 port (from SD/USB 3.1 Combo) at front panel
 - ❖ Four USB 3.0 ports at rear panel
- ❑ **40Gb/s Thunderbolt™ 3 support**
 - ❖ Four lanes of PCI Express Gen3
 - ❖ Four lanes of DisplayPort 1.2
 - ❖ Native USB 3.1 (10Gb/s)
- ❑ **Onboard Serial ATA**
 - ❖ SATA 6.0 Gb/s transfer rates
 - ❖ Supports one 2.5-inch SATA HDD or SSD (max 9.5mm height)
- ❑ **Expansion slot**
 - ❖ One M.2 Slot (22/42,22/60,22/80) supports PCIe x4 SSD / Intel Optane Memory
 - ❖ One M.2 SATAIII SSD slot (22/42)
- ❑ **Onboard Single LAN**
 - ❖ Supports 10/100/1000 Mbps operation, IEEE 802.3
- ❑ **WiFi/Bluetooth support**
 - ❖ 802.11ac (dual-band), n/g/b
 - ❖ Bluetooth v4.2
- ❑ **Onboard Audio**
 - ❖ Stereo analog audio output and Microphone input
- ❑ **Onboard Graphics support**
 - ❖ Intel HD Graphics 630
 - ❖ DP1.2 (max resolution: 4096x2160 @60Hz)
 - ❖ HDMI2.0 (max resolution: 3840x2160 @60Hz)
- ❑ **Product Size**
 - ❖ 184.6mm x 184.6mm x 71.5mm

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 onto the system.
 - The system does not function properly even if you follow the operating instructions.
 - The system was dropped or the cabinet is damaged.

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 is damaged or missing, contact your retailer.

Package contents

- 1 x ZOTAC ZBOX
- 1 x VESA mount
- 1 x AC Adapter
- 1 x Power Cord
- 1 x Antenna
- 1 x Support DVD
- 1 x USB flash drive with OS drivers
- 1 x User Manual & Quick Start Guide
- 1 x Warranty Card



Getting to know your ZOTAC ZBOX

Front view



Refer to the diagram below to identify the components on the front of the ZBOX.

1. Power button

The power button turns the system ON and OFF.

2. USB 3.1 Type-C port

The type-C USB 3.1 port supports the SuperSpeed USB 3.1 devices. Use this port for USB 3.1 devices for maximum performance with USB 3.1 compatible devices.

3. Power LED

The power LED is always ON when power is on.

4. Combo USB 3.1 port / Memory card slot

The Combo USB 3.1 port / Memory card slot is compatible with USB 3.1 devices or SD/SDHC/SDXC cards used in devices like digital cameras, MP3 players, mobile phones and PDAs.

5. Microphone jack

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

6. Headphone/Audio Out jack

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

Rear view



Refer to the diagram below to identify the components on the back of the system.

1. Power input (DC19.5V)

The supplied power adapter converts AC power to DC power for use with this power port. To prevent damage to the mini-PC, always use the supplied power adapter.

2. Thunderbolt 3 port

The Thunderbolt 3 port is compatible with Thunderbolt 3 device such as external graphics, DisplayPort device and USB Type-C device.

3. HDMI port

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.

4. DisplayPort

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

5. USB 3.0 ports


The USB 3.0 port supports the SuperSpeed USB 3.0 devices. Use this port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

6. Ethernet port

The eight-pin RJ-45 LAN port supports standard Ethernet cable for connections to local area networks (LAN) with speeds of 10/100/1000Mbps.

7. WiFi antenna connector

The WiFi antenna connector supports the included WiFi antenna.

 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 the ZOTAC ZBOX

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

1. Press the two buttons to release the cover.

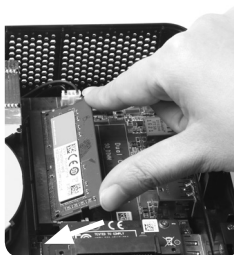


2. Gently remove the cover as shown below.



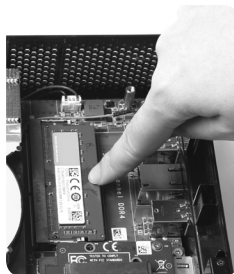
Installing a memory module

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



Note: When installing two SO-DIMM memory modules, please insert a module into the lower slot first.

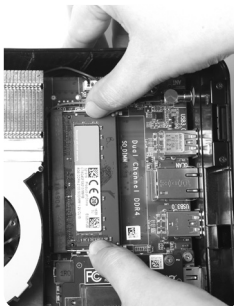
2. Gently press down on the memory module until it locks into place by the arms of the memory slot.



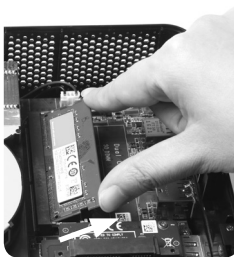
Note: This ZOTAC ZBOX accommodates two DDR4 SO-DIMM memory modules. You must install at least one module for the system to function. PLUS models include memory pre-installed.

Removing a 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.

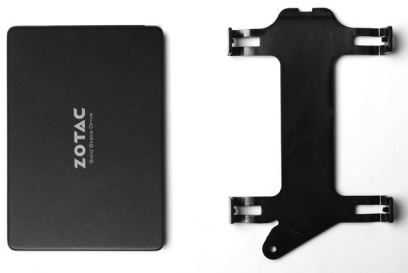


2. Remove the memory module from the slot at a 45-degree angle.

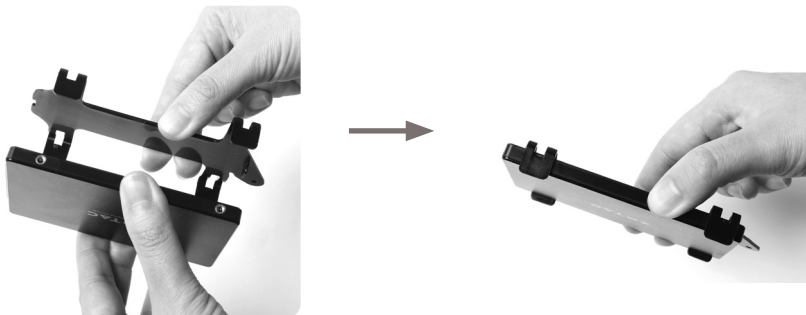


Installing a hard disk drive

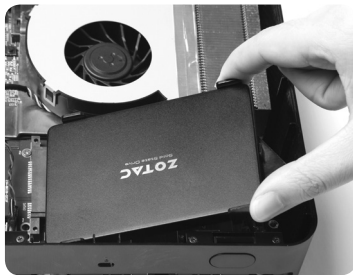
1. Locate the 2.5-inch SATA hard disk drive and the hard disk drive bracket.



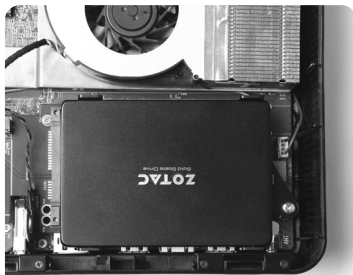
2. Install the hard drive to the hard disk drive bracket.



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



4. Secure the installed drive with a thumb screw.



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.



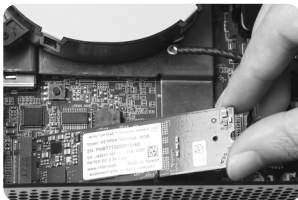
2. Gently press down on the M.2 SSD module, and install the screw.



*120GB M.2 SSD is pre-installed in Plus and Windows versions.

Installing Optane memory / M.2 SSD module

1. Insert an Optane memory / M.2 SSD module into the slot at a 45 degree angle.



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



*You can only use either M.2 PCIe x4 SSD or Optane Memory at a time on this slot.

Setting up your ZOTAC ZBOX

Please connect your peripherals before using your ZOTAC ZBOX.



1. Connecting to Thunderbolt 3 device

Connect Thunderbolt 3 device such as external graphics, DisplayPort device and USB Type-C device.

2. Connecting to an HDMI display

Connect one end of an HDMI cable to an HDTV or monitor, and the other end to the HDMI port on the system rear panel.

3. Connecting a DisplayPort display

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

4. Connecting to USB 3.0 devices

Connect USB 3.0 devices such as external hard disk drives, SSDs and flash drives to the USB 3.0 port on the system rear panel.

5. Connecting to a network

Connect one end of a network cable to the LAN port on the system rear panel and the other end to a network router, hub or switch.

6. Connecting the WiFi antenna

Connect the WiFi antenna to the WiFi antenna connector.

7. Connecting the power adapter and turning on the ZBOX

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 conserve power.

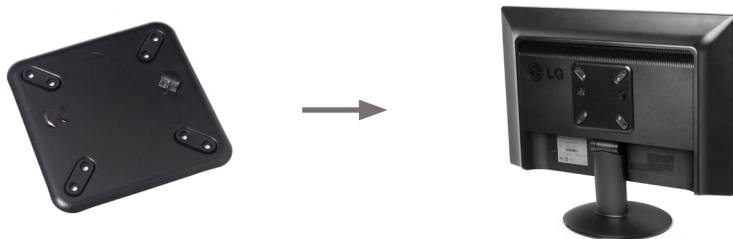
Positioning the ZOTAC ZBOX

- Do not position the ZOTAC ZBOX where the ventilation holes are covered. To guarantee proper use, leave 4 inches (10 cm) of spacing in front of the ventilation holes.
- ZOTAC ZBOX mini-PC systems provide ample connectivity in a tiny form factor, please choose connectors and cables in appropriate sizes to avoid interference.

Mounting the ZOTAC ZBOX to an LCD monitor

You can attach your ZOTAC ZBOX to the back of a VESA75/100 compliant monitor.

1. Secure the VESA mount to the LCD monitor using 4 screws.
Disclaimer: ZOTAC cannot be held liable for damages resulting from an improper installation.



2. Align the ZOTAC ZBOX mounting holes to the VESA mount attachment pegs. Attach the ZOTAC ZBOX to the VESA mount and gently press down to secure the ZBOX to the mount.



3. Connect the ZOTAC ZBOX to your LCD monitor with an HDMI/DP cable.



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 10 64-bit

Follow the instructions below to install an operating system:

1. Attach external DVD drive via USB 3.0 ports.
Note: USB 3.1 Type-C ports do not support OS installation.
2. Insert disk for operating system (Windows or Linux).
3. Wait for the ZOTAC ZBOX to boot from the disk.
4. Follow the onscreen directions to install the operating system.
5. 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 driver DVD and USB flash drive:

- Windows 10 64-bit

Follow the instructions below to install the system drivers:

1. Insert the ZOTAC ZBOX driver DVD or driver 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 DVD and USB flash drive:
 - Intel Chipset Driver



- HDA Sound Driver
- Intel Graphics Driver
- Intel Ethernet PCI-E Driver
- Wireless Network Driver
- Intel Management Engine
- Bluetooth Driver
- Thunderbolt
- MassStorage Driver
- Asmedia USB Controller
- USB Charger (optional)

Note: If you want to use high-amperage USB charging for smartphones and tablets, please install the driver USB Charger 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.

Using your ZOTAC ZBOX

Configuring a wireless connection

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

1. Double-click the wireless network icon (pic) in the notification area.
2. Select the wireless network you want to connect to from the list and click Connect.
3. After connection is established, you will see “Connected.”

Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.

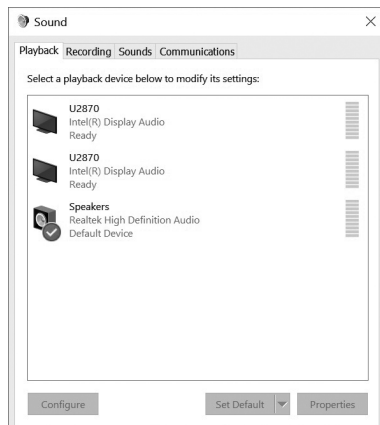
Note 2: Enter the network security key if necessary.



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. Access the Sound settings via the system Control Panel.
2. Under Playback devices, click the display device that corresponds with your audio compatible display.
3. Click the “Set Default” button in the lower right hand corner.
4. Click “OK” to exit the setup.



Intel® Optane™ technology

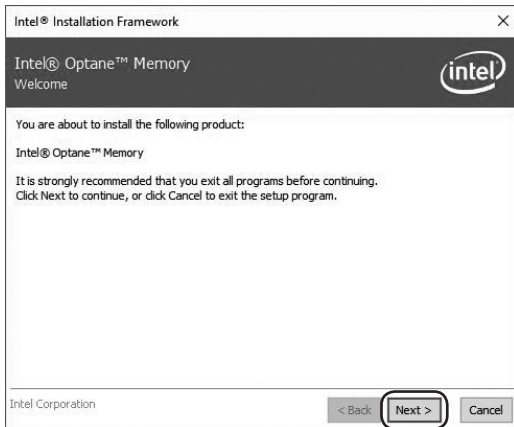
Intel® Optane™ is a new ultra-high-speed memory technology with 3D XPoint™ memory media, compatible with NVMe storage protocol.

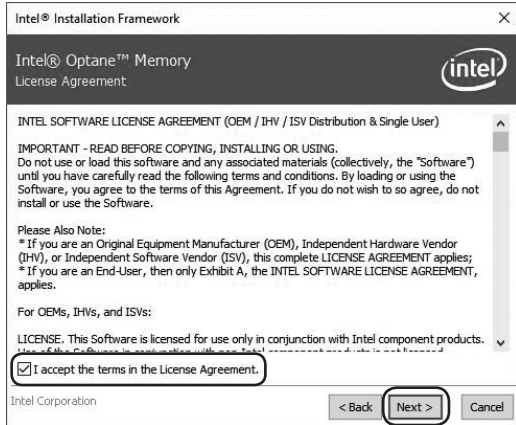
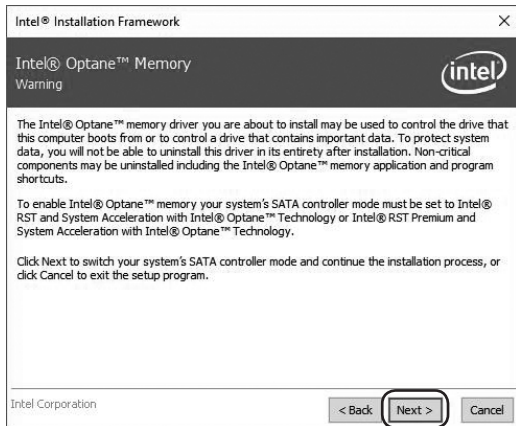
The program SetupOptaneMemory.exe is included in the driver DVD and USB flash drive (X:\OptaneMemory\SetupOptaneMemory.exe).

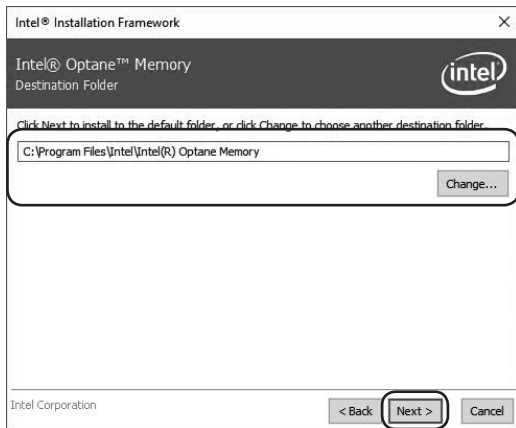
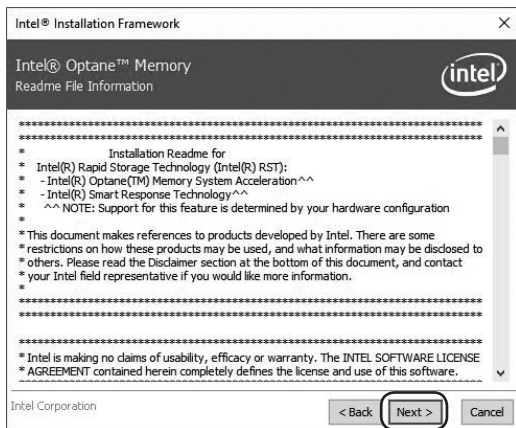
Enabling Intel® Optane™ memory

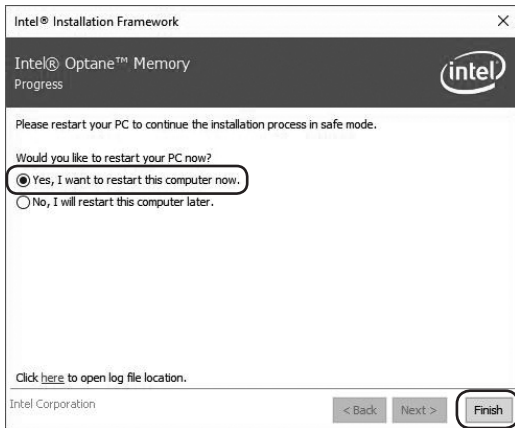
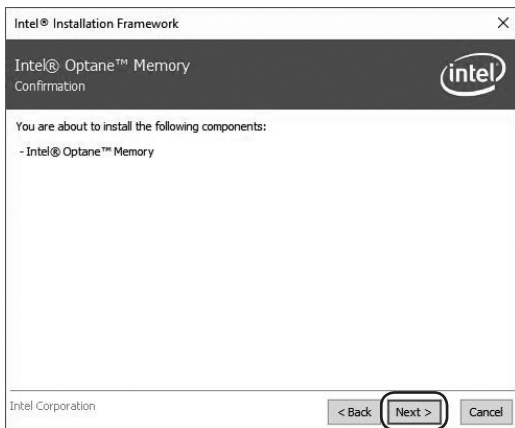
Please follow the recommended procedure to enable Optane memory, as listed below. (X: your driver DVD / USB flash drive letter)

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.

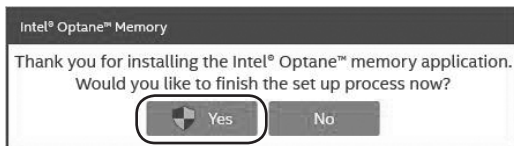




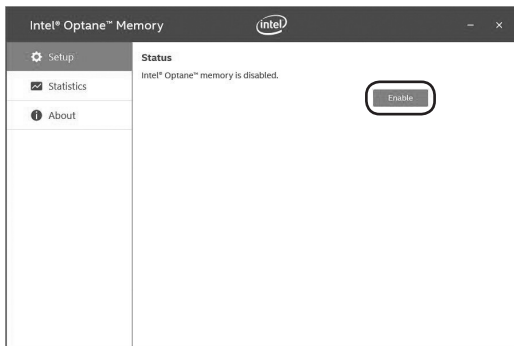


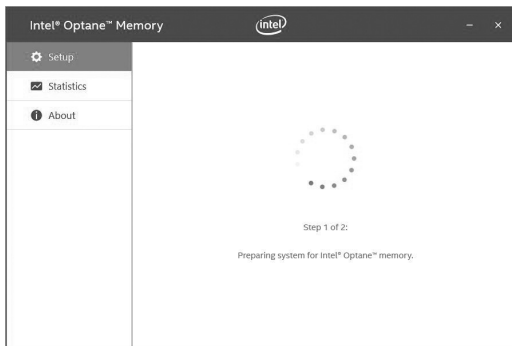
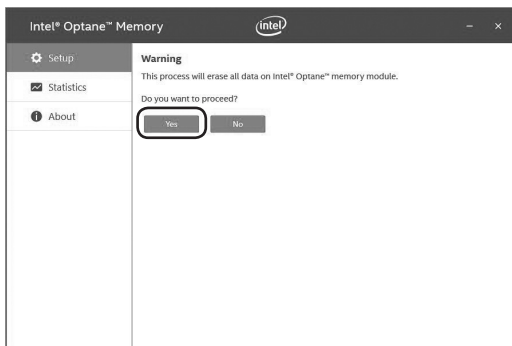


3. Restart the system, the following dialog box will display. Click “Yes”.

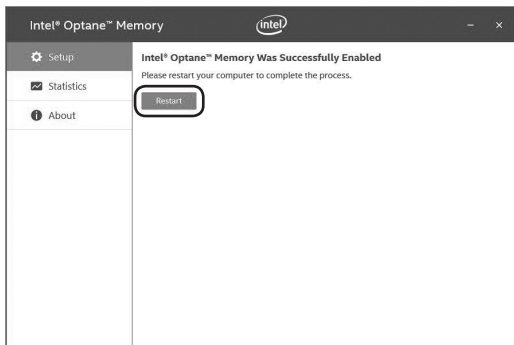


4. When the Intel® Optane™ Memory interface displays, click “Enable”.

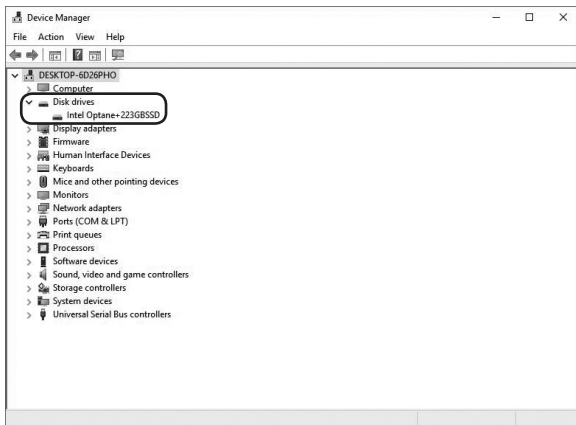




5. Click “Restart” to complete enabling the Optane Memory.

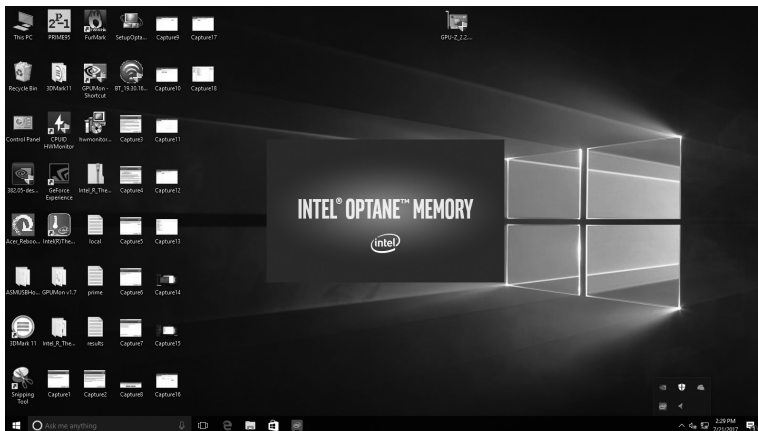


6. When the Optane Memory is successfully enabled, the created Intel® Optane™ information will show in Device Manager > Disk drivers.

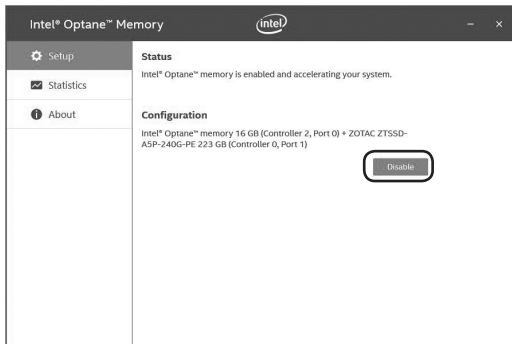


Disabling Intel® Optane™ memory

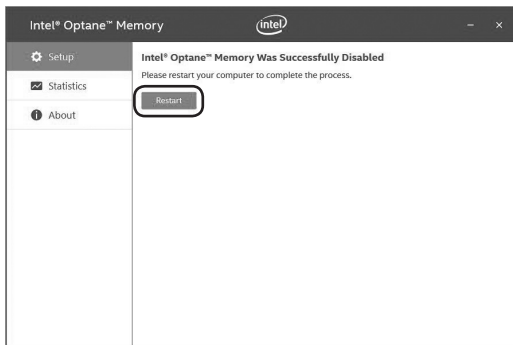
1. Double-click the Intel icon  in the lower right corner of the desktop.



2. When the Intel® Optane™ Memory interface displays, click “Disable”.



3. Click “Restart” to complete disabling the Optane Memory.



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

