PREDATOR

Predator PO7-640
User's Manual

acer

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HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

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Table of Contents

Upgrading your Computer

In this section, you will find:

- Instructions on how to replace a hardware component

1. UPGRADING YOUR COMPUTER

Installation precautions

Before you install any computer component, we recommend that you read the following sections. These sections contain important ESD precautions along with pre-installation and post-installation instructions.

ESD precautions

Electrostatic discharge (ESD) can damage your processor, disk drives, expansion boards, and other components.
Always observe the following precautions before you install a computer component:

1. Do not remove a component from its protective packaging until you are ready to install it.

2. Wear a wrist grounding strap and attach it to a metal part of the computer before handling components. If a wrist strap is not available, maintain contact with the computer throughout any procedure requiring ESD protection.

Required tools

In performing the component replacement process, you will need the following tools:

- Philips screwdriver
- Hex screwdriver
- Flat screwdriver
- Scissors

> 🖉 **Note**
> The screws for the different components vary in size. During the disassembly process, group the screws with their corresponding components to avoid mismatches when putting back the components.

Pre-installation instructions

Always observe the following before you install any component:

1. Make sure that the ODD and card reader slot is empty.
2. Turn off the power to the computer and all peripherals.
3. Unplug the power cord from the computer.
4. Unplug the network cable and all connected peripheral devices from the computer.
5. Place the computer on a flat, steady surface.

   ⚠ **WARNING: Hot surface. Do not touch.**
6. Open your computer according to the instructions on removing the left side system cover on page 7 and removing the right side system cover on page 9.
7. See the following sections for specific instructions on the component you wish to install.

🖐 **Warning**

Not turning off the computer properly before you start installing the components may cause serious damage. Do not attempt the procedures described in the following sections unless you are a qualified service technician.


Post-installation instructions

Observe the following after installing a computer component:

1. See to it that the components are installed according to the step-by- step instructions in their respective sections.
2. Replace any expansion boards or peripherals that you removed earlier.
3. Replace the system covers. See Installing the left side system cover on page 8 and installing the right side system cover on page 10.
4. Connect the necessary cables.
5. Turn on your computer.

System Upgrade

Removing the Left side system cover

1. Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the Pre- installation instructions on page 6.

2. Remove the two screws that secure the system cover to the computer.

3. Slide the cover toward the back of the computer and pull away from the top of the computer.
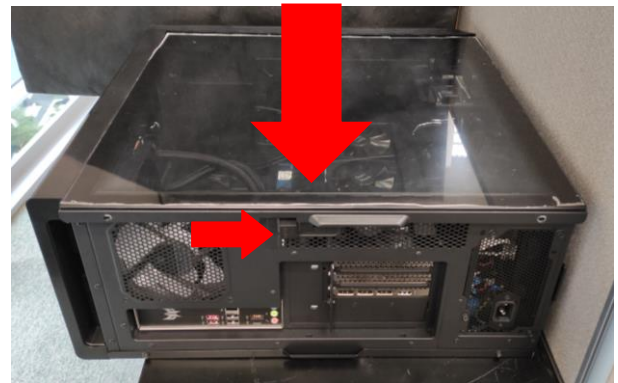
4. Set the cover aside for re-installation later.

> 📎 **Note**
> When disassembling, the machine must lie flat and not upright

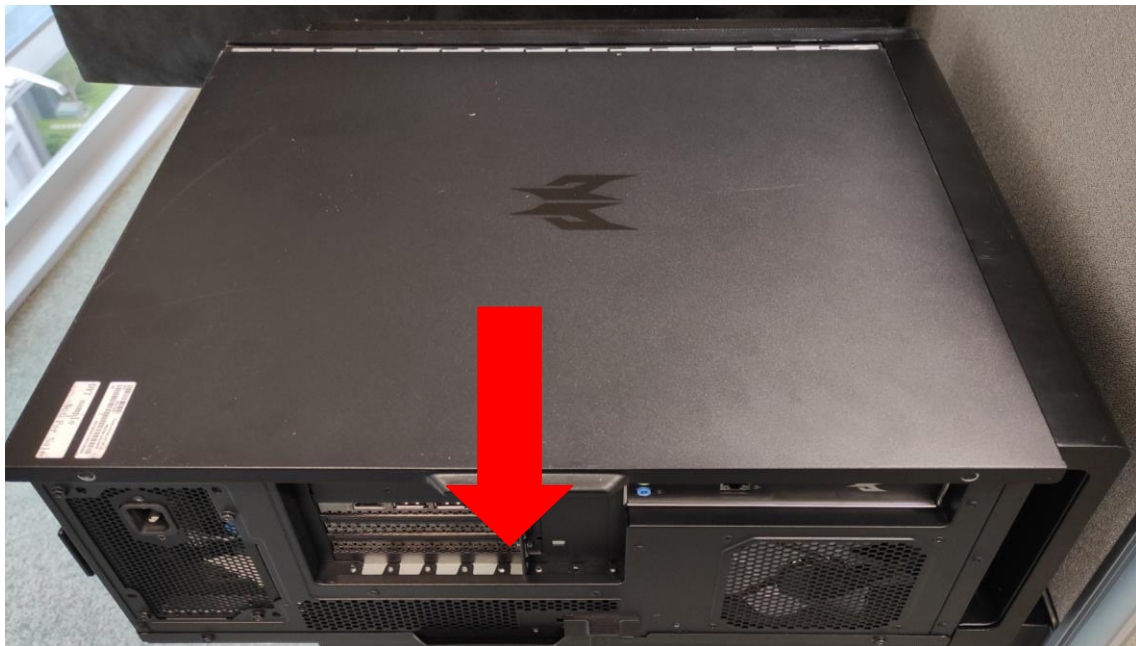## Installing the Left side system cover

1.   Align the cover hook to the sides of the computer and slide the cover toward the front of the computer.

2.   Secure the cover with two screws.

3.   Observe the Post-installation instructions on page 6.

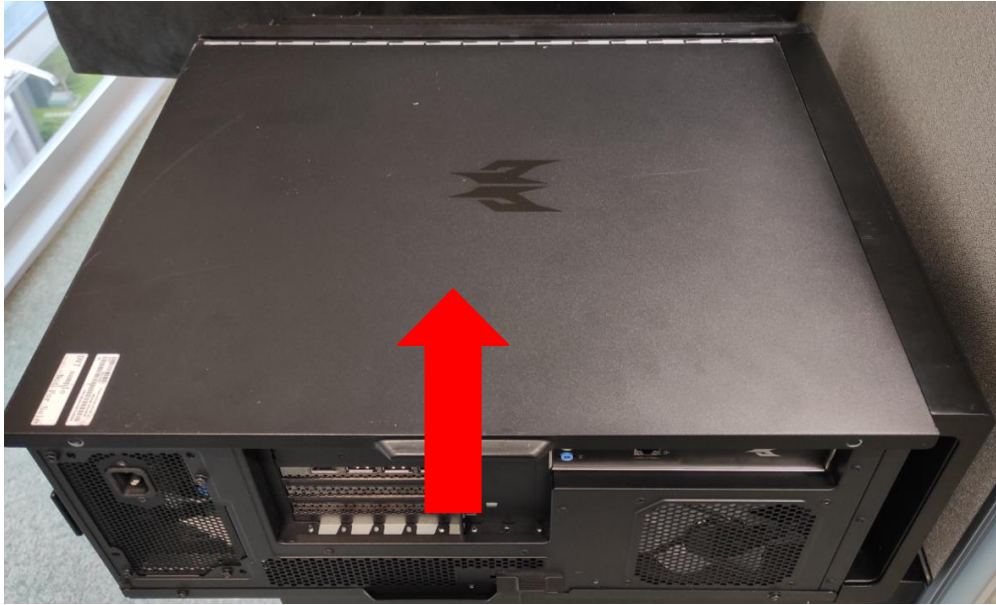# Removing the Right side system cover

1. Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the Pre- installation instructions on page 6.

2. Remove the two screws that secure the system cover to the computer.

3. Slide the cover toward the back of the computer and pull away from the side of the computer.

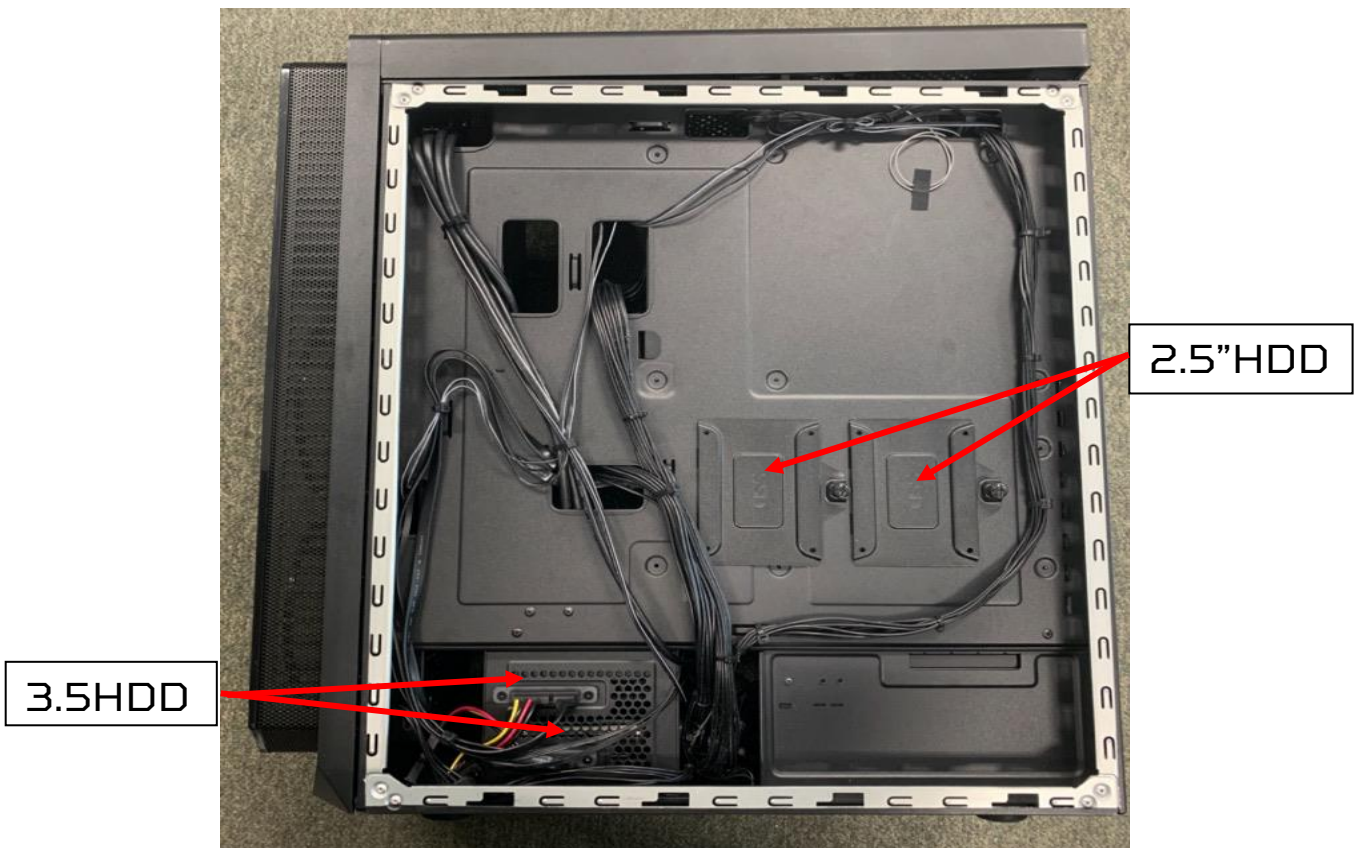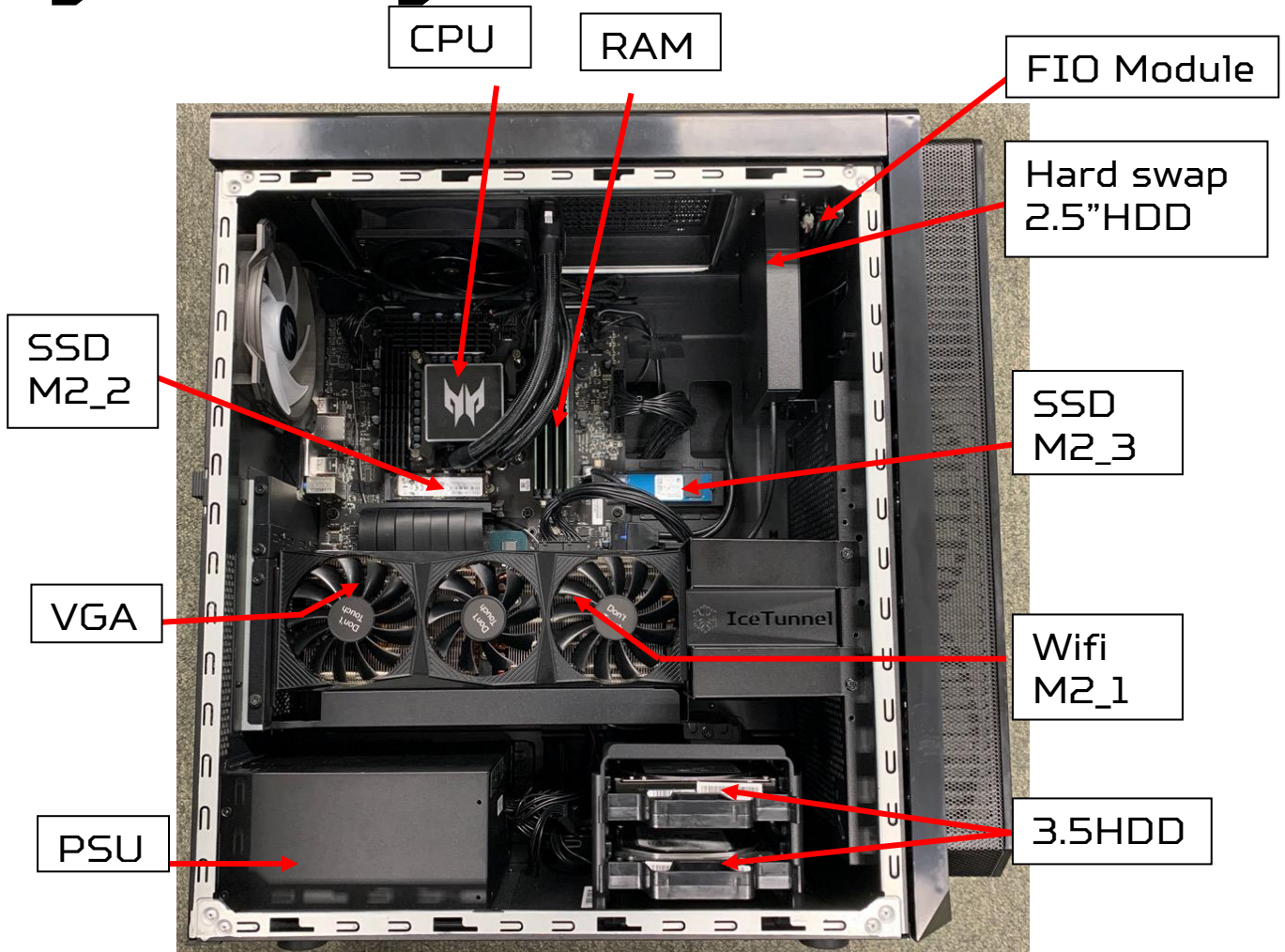4. Set the cover aside for re-installation later.

Installing the Right side system cover

1. Align the cover to the sides of the computer and slide the cover toward the front of the computer.

2. Secure the cover with two screws.

3. Observe the Post-installation instructions on page 6

System Layout

CPU

RAM

FIO Module

Hard swap 2.5"HDD

SSD M2_2

SSD M2_3

VGA

Wifi M2_1

PSU

3.5HDD

2.5"HDD

3.5HDD

Hard drives

The computer supports installation of two 3.5-inch SATA hard drives in the internal HDD cage.

Removing the 3.5-inch hard drives

1. Perform Pre-installation instructions on page 6.
2. Pull black rack out from HDD cage and take it off.

3. Remove the hard drives from the rack.

Installing the 3.5-inch hard drives

1. Remove the new hard drive from their packaging.
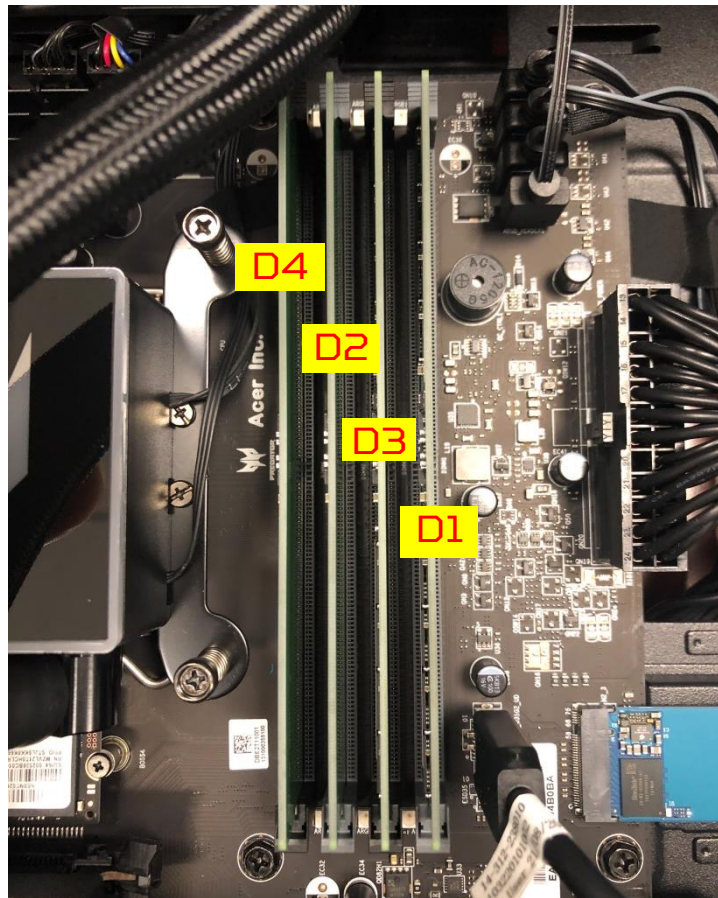2. Insert the new hard drive into the black rack.

3. Insert black rack into HDD cage.

4. Observe the Post-installation instructions on page 6

Memory

The computer has four DDR5 U-DIMM slots that support up to 64 GB maximum system memory.

Memory configuration guidelines

- To ensure data integrity, use only Acer-approved DDR5 memory modules.
- Memory modules must be installed starting with DIMM1 slot.
- Always handle memory modules by its edges.
- When installing memory modules, populate the DIMM slots according to the table below.

Rule	DIMM1	DIMM3	DIMM2	DIMM4
Memory A>B [Different capacity value]	A	/	/	/
	A	/	A	/
	A	/	B	/
	A	A	A	/
	A	B	A	/
	A	A	A	A
	A	B	A	B

Size	DIMM1	DIMM3	DIMM2	DIMM4
8GB	8GB	N/A	N/A	N/A
16GB	16GB	N/A	N/A	N/A
16GB	8GB	N/A	8GB	N/A
32GB	16GB	N/A	16GB	N/A
24GB	8GB	8GB	8GB	N/A
48GB	16GB	16GB	16GB	N/A
32GB	8GB	8GB	8GB	8GB
64GB	16GB	16GB	16GB	16GB

> **Note**
> 1. Follow Intel's SPEC, since this system design w/ 4 DIMMs, the system only support 4400MHz whether plugging in memory is 4800MHz or higher.
> 2. Since ADL platform limitation, It is not recommended to mix 1R and 2R memory

Removing a memory module

1. Perform Pre-installation instructions on page 6.

2. Press outward the holding clips on both sides of the DIMM slot outward to release the memory module (1).

3. Gently pull the memory module upward to remove it from the DIMM slot (2).
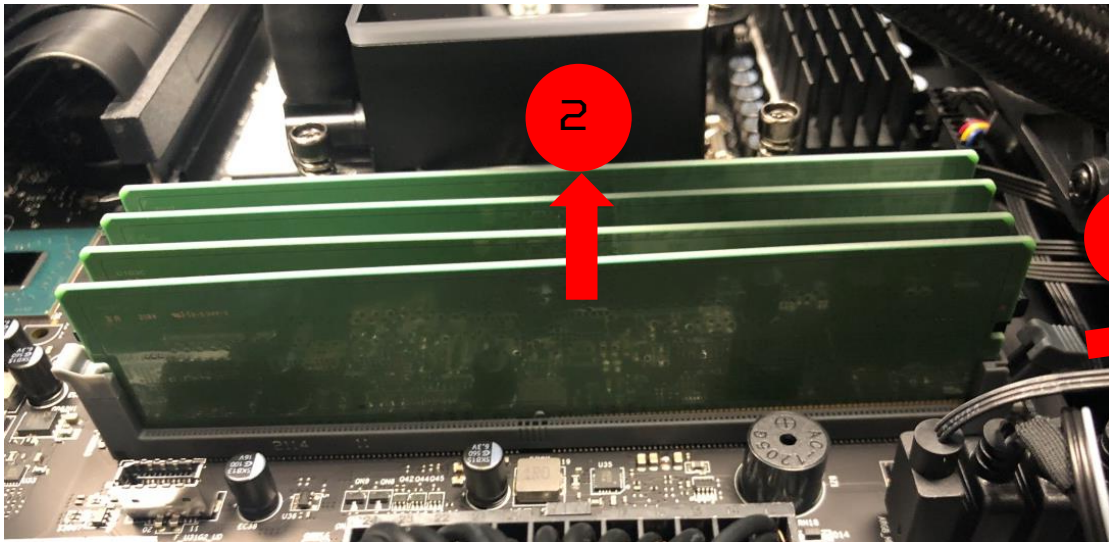
4. Repeat steps 2~3 to remove the other memory modules.

Installing a memory module

> ### 📎 Note
> DIMM slots on the mainboard must be installed only in certain configurations. Numbers next to DIMM slots correspond to installation sequence.
> Be sure to install the memory module in DIMM1 slot followed by DIMM2 slot.

1. Select an empty DIMM slot.
2. Remove the new memory module from its packaging, handling it by the edges.
3. Align then insert the memory module into the DIMM slot (1).
4. Insert the memory to the slot until the retaining clips snap inward (2).
    The module is keyed so it can only be inserted in one direction. If the module does not fit, make sure that the notch in the module lines up with the tab in the memory slot.
5. Repeat steps 1~4 to install the other memory modules.
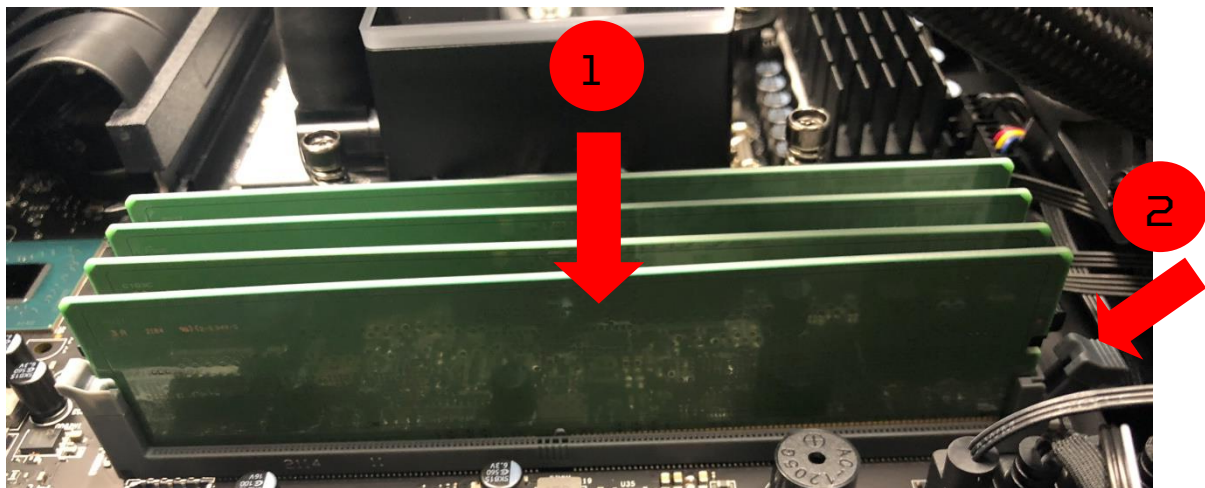
6. Observe the Post-installation instructions on page 6.

Graphics board

The computer contains one or two Graphics boards installed in the PCIe x16 slots. The detail configuration will be differed by different models.

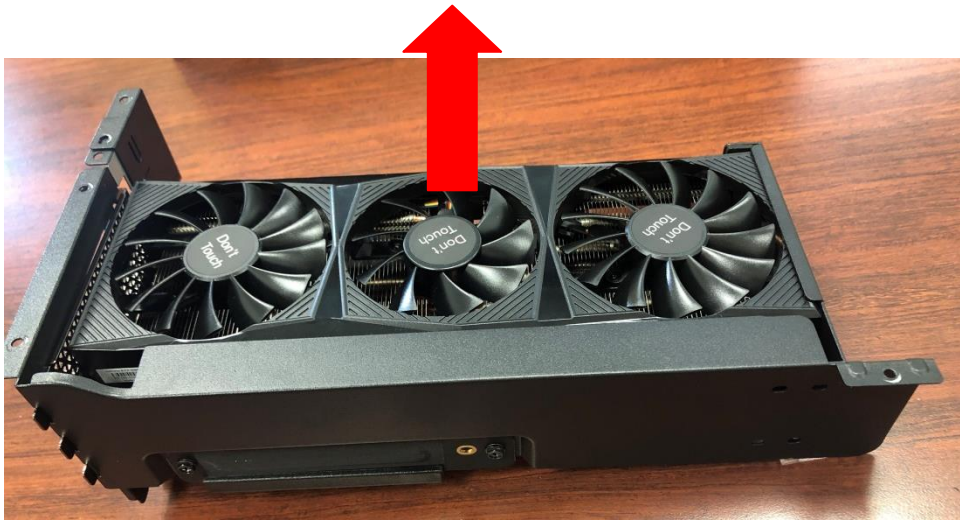## Removing the Graphics board

1. Perform Pre-installation instructions on page 6.
2. Remove five screw for VGA BRKT & PCIE cable & disconnect the power cables from the Graphics board and put it on the side.
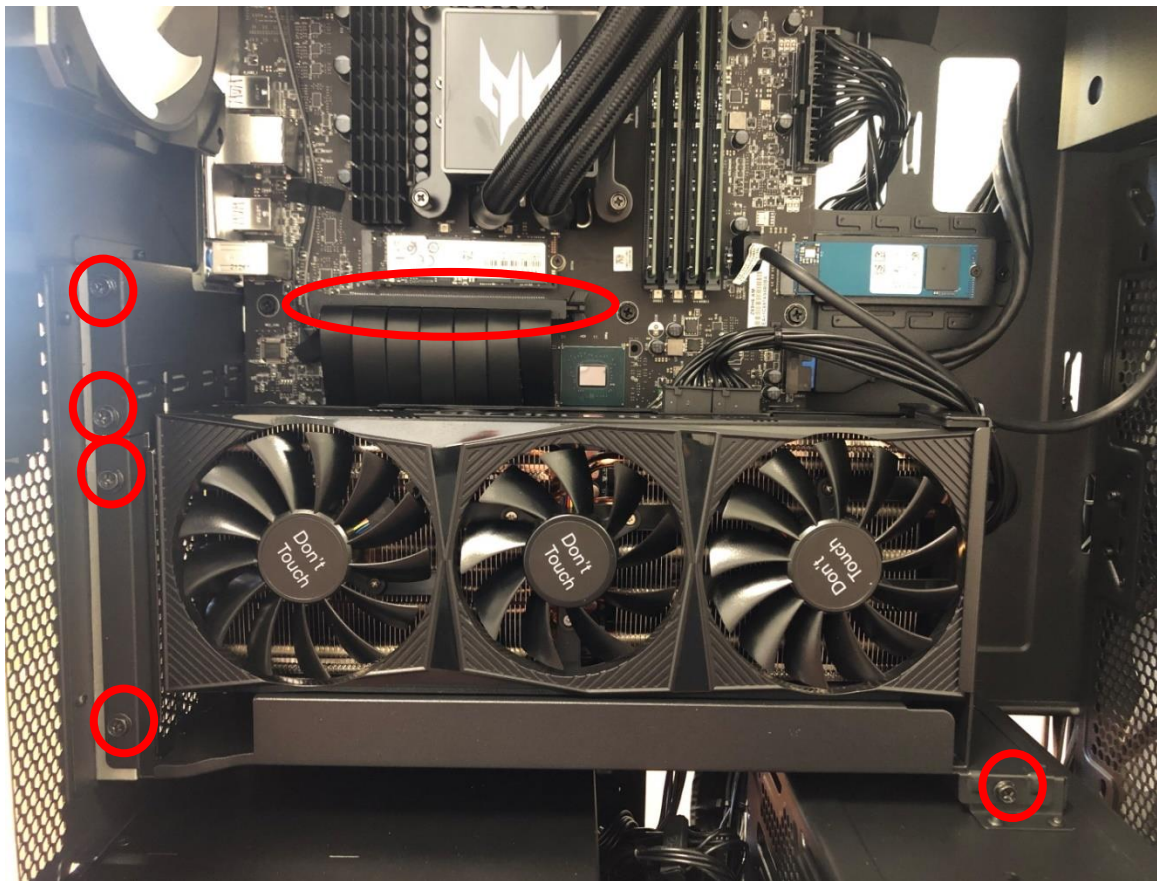
3.   Remove five screws and release the baffle.
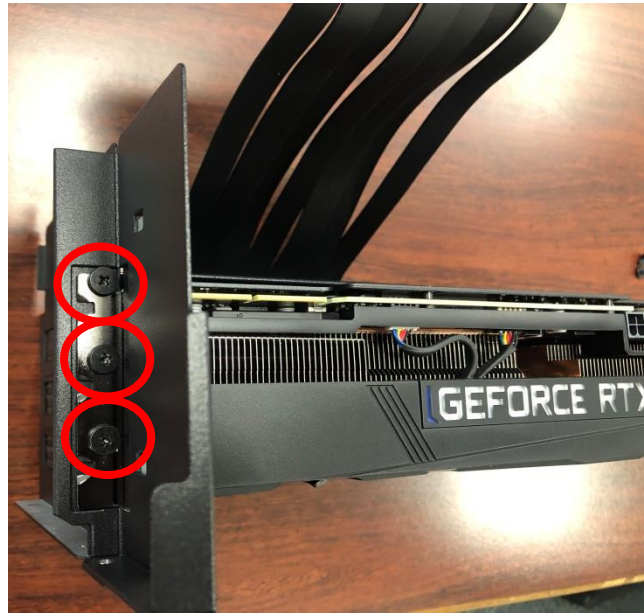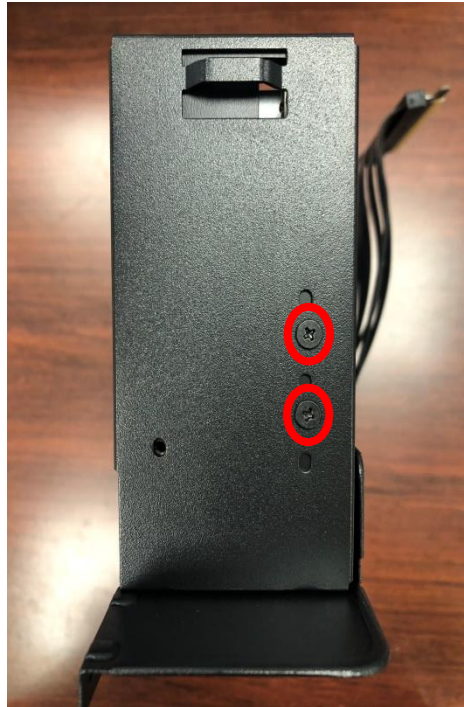
4. Detach the Graphics board from the PCIe x16 slot

5. Remove the screw that secure the Graphics board to the VGA Holder Bracket.

Installing the Graphics board

1.   Remove the new graphics board from its packaging.
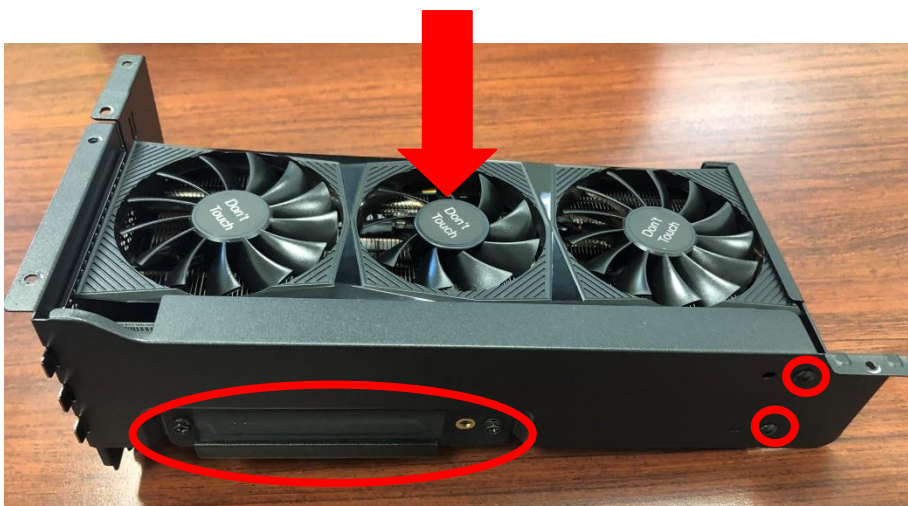2.   Fix Graphics board on VGA Holder Bracket with three screws

3.   Insert the Graphics board into the PCIe x16 slot BRKT and fix VGA Holder Bracket on Graphics BRKT with two screws.
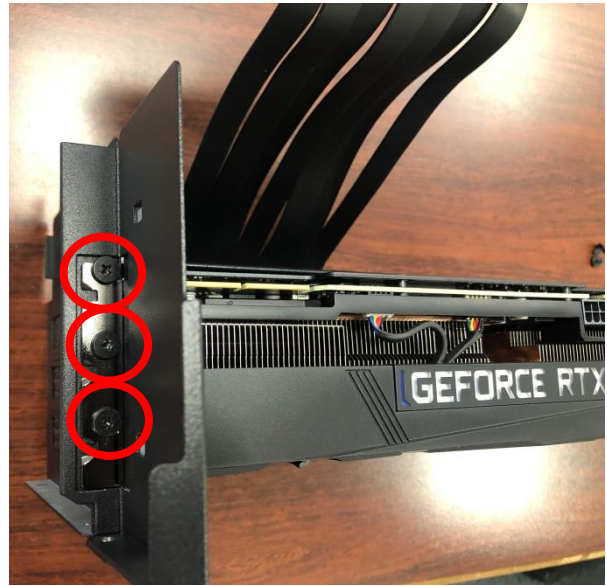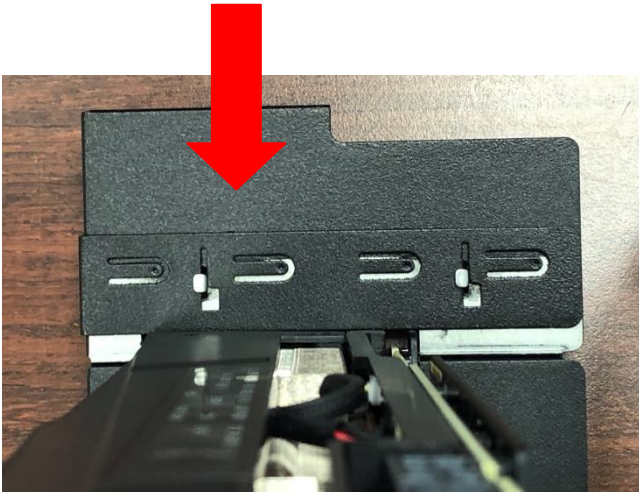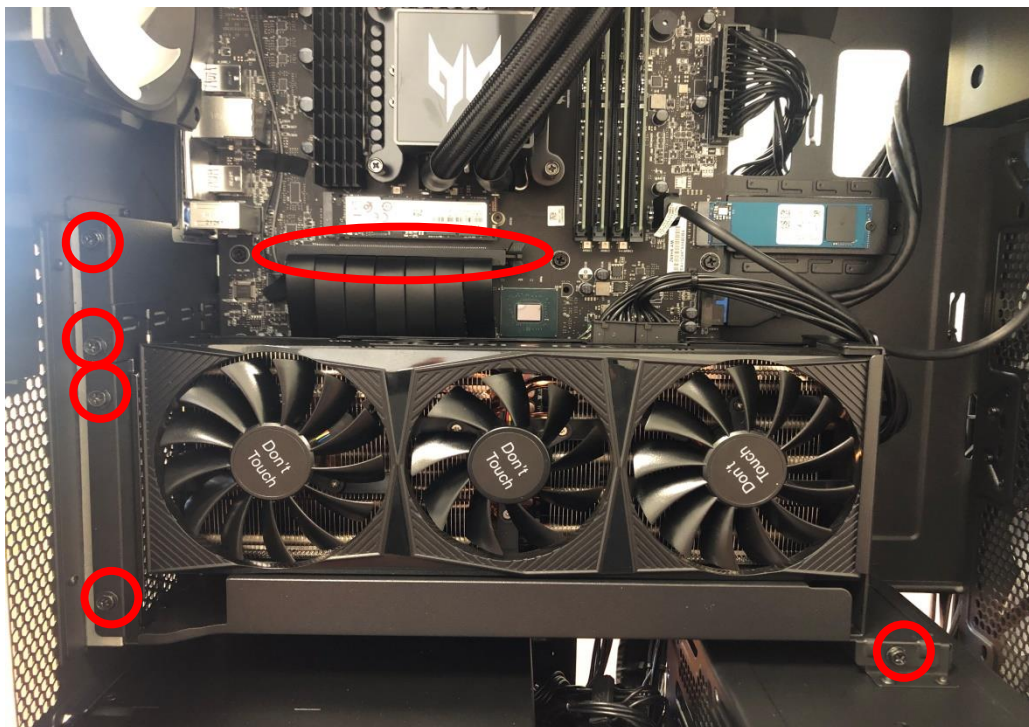
> 📎 **Note**
>
> To replace/upgrade Graphics board, please check the specification of Graphics board & power supply first in order to make sure the Graphics board and power supply could work.
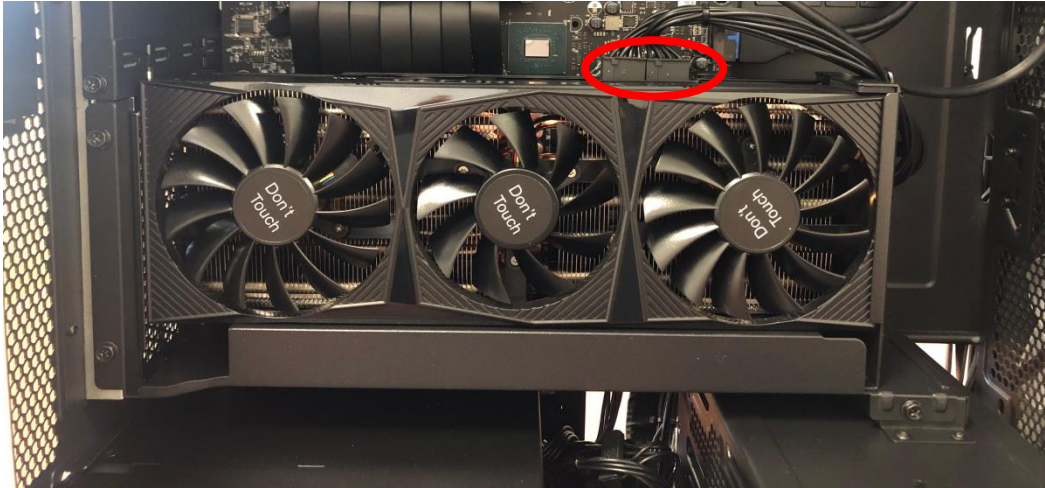
4. Secure the Graphics BRKT with screws and push the baffle down.

5. Secure the Graphics BRKT with screws and Insert the Graphics cable into the PCIe x16 slot.

6.   Connect the power cables to the Graphics board.

7.   Observe the Post-installation instructions on page 6

M.2 SSD module

The computer contains one M.2 SSD module installed in the M.2 PCIe slot.

Removing the M.2 SSD module

1. Perform Pre-installation instructions on page 6.
2. Remove the Graphics board. See Removing the Graphics board.
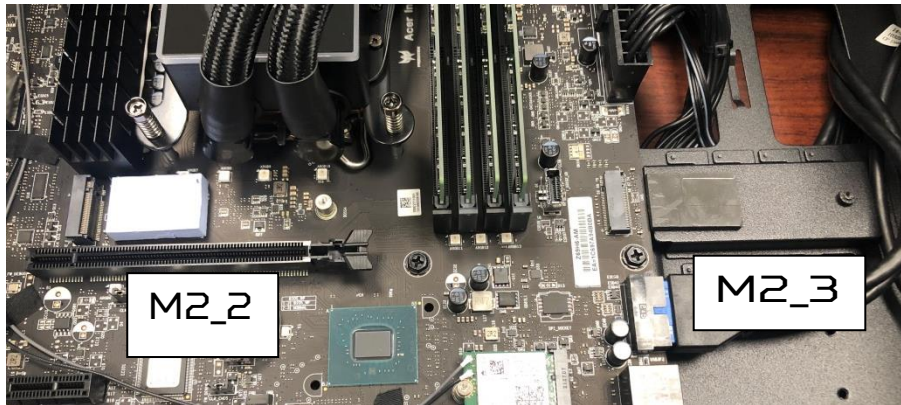3. Remove the screw that secures the M.2 SSD module from the mainboard.
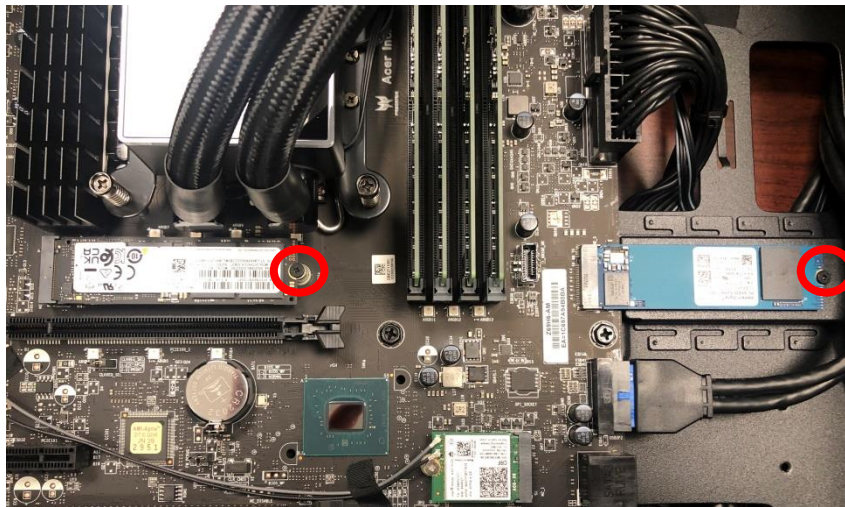
4. Detach the M.2 SSD module from the mainboard.
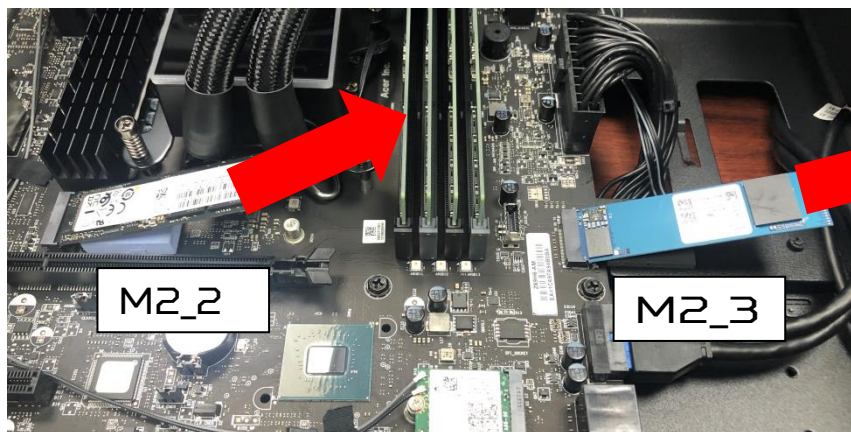
Installing the M.2 SSD module

1. Remove the new M.2 SSD module from its packaging.
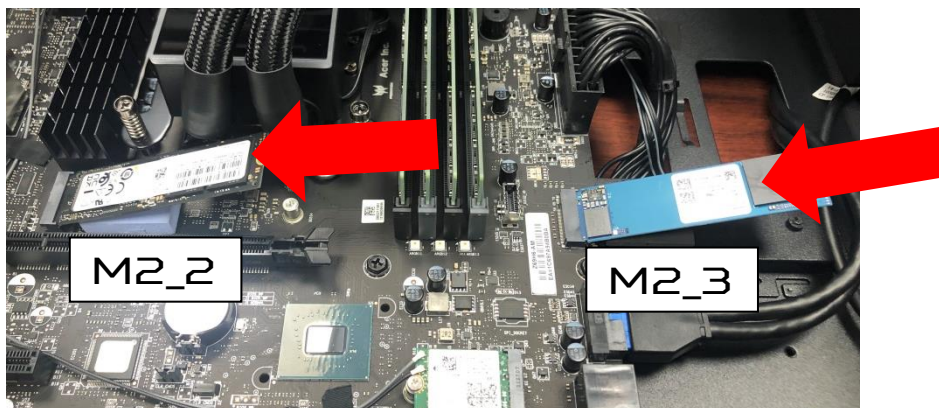2. Positioning M.2 SSD thermal pad on MB.

3. Insert the M.2 SSD module into its slot in the mainboard.
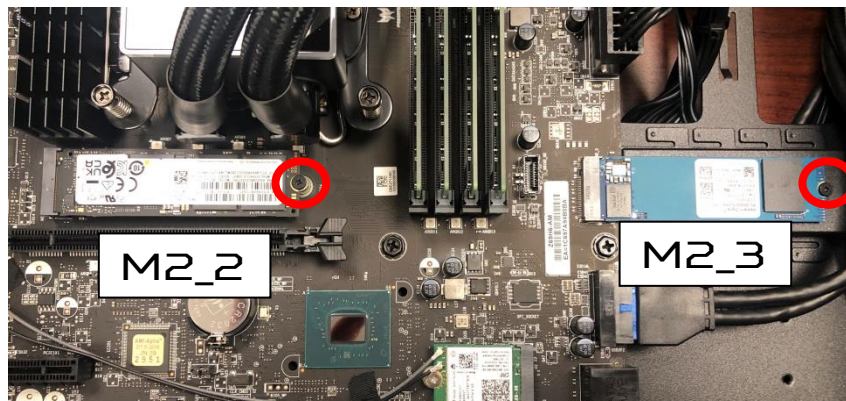
> ✎ **Note**
> SSD (Gen4) must be first install on M2_2 slot.

4. Secure the M.2 SSD and thermal module with screws.

5. Replace the Graphics board. See Installing the Graphics board.
6. Observe the Post-installation instructions on page 6.

Dust filter

Removing the Dust filter

1. Before you proceed, make sure that you have turned off your computer and all peripherals connected to it. Read the Pre- installation instructions on page 6.

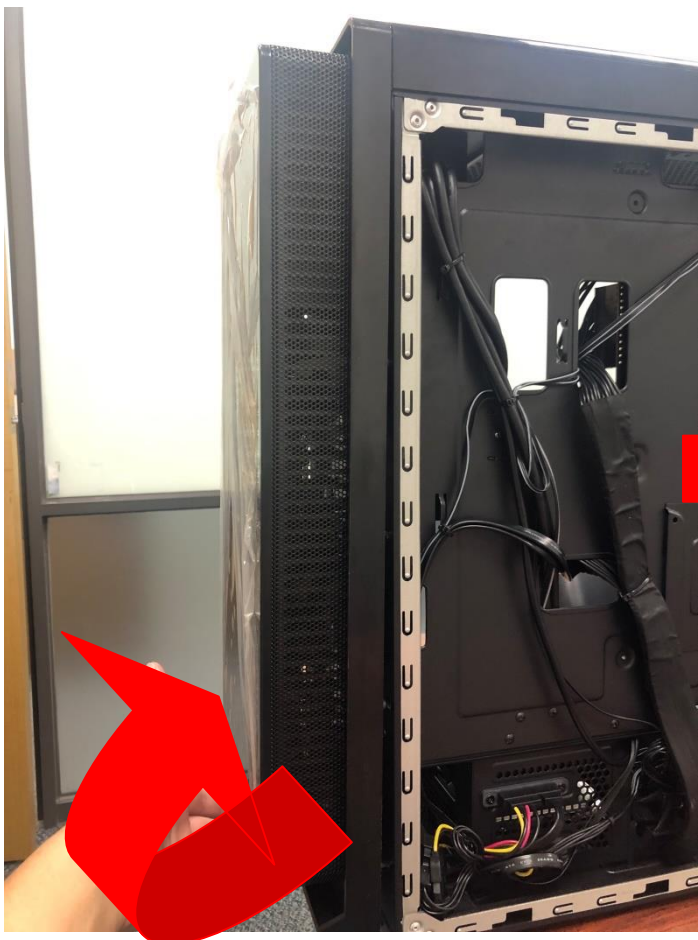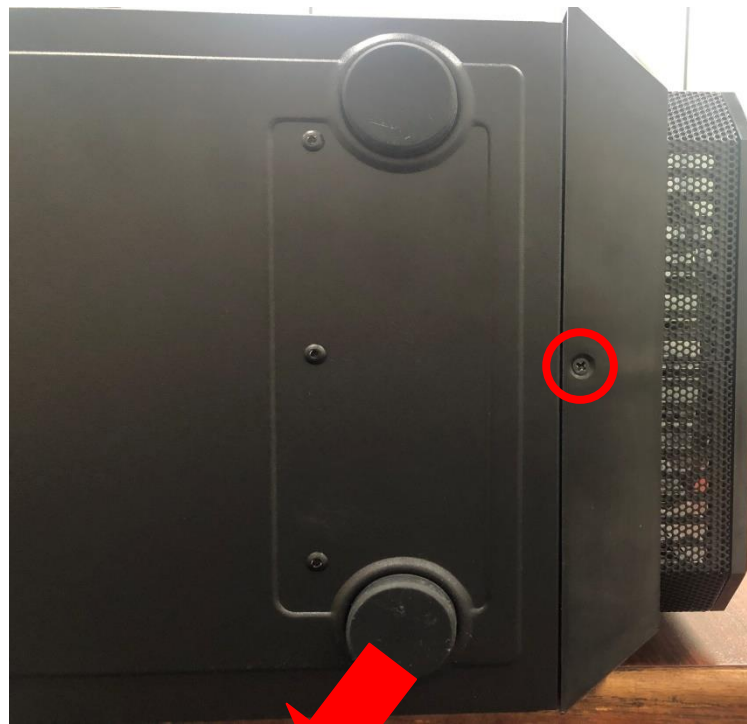2. Push Handle from Dust filter and take it off

Removing the Top Cover

1.   Use tool to push hook.

Removing the Front Bezel

1. Remove the screws that the Front Bezel bottom and take it off.

PredatorSense

In this section, you will find:

- Introduction to the PredatorSense utility
- How to use PredatorSense

2. PREDATORSENSE

PredatorSense (DT) is an Acer proprietary utility to enhance the user experience of Gaming products on Microsoft Windows 11.
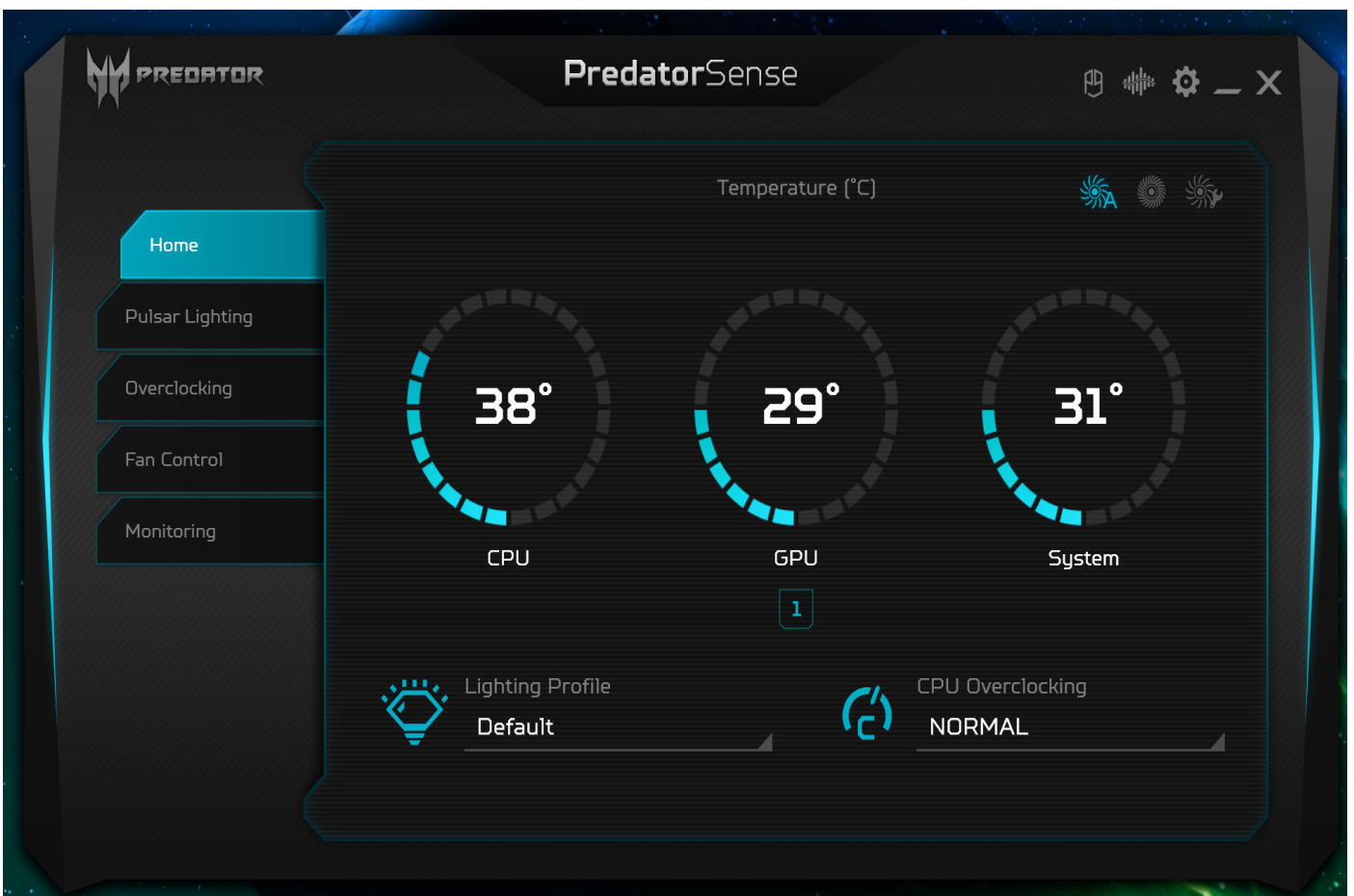
The central idea of this utility is to provide a user interface to easily control fan speed, ARGB chassis and also display system information.

PredatorSense features

- **Home**
- **Pulsar Lighting**
- **Overclocking**
- **Fan Control**
- **Monitoring**

To set up the PredatorSense application (Windows 11):

1. From the Start menu, select **All apps**.
2. Select **PredatorSense**.

Alternatively, you can double-click the PredatorSense desktop shortcut to run the application.

Category	Description
Home	**Provide overview of all features with quick adjustment** • CPU/GPU/System health information • Fan speed control (Auto, Gaming and Custom) • Lighting profile • CPU overlocking (Normal, Faster and Turbo)
Pulsar Lighting	**Provide control and adjustment for the LEDs on Front Face, CPU Face , Rear Face and Motherboard.** • On/Off • Color: 9 basic colors (last one is rainbow color), 9 recent • Colors which user creates the color via More Color(palette) button. • Provide the two control method including Global Control and Area Control button • Lighting Effects: Off, Normal, Breathing, Heart Beat, Blink, Breathing randomly, Blink randomly, Parallel rainbow, Sequential rainbow, Breathing rainbow, Wave, Risen, Music Effect 1, Music Effect 2, Music Effect 3 Color cycle. • [Note] Please connection earphone before to using music • Lighting profile
Overclocking	**Provide CPU overclocking in 3 levels, Normal, Faster and Turbo level. And show the CPU loading, frequency, Max frequency.** • The physical Turbo button will light on when OC level is Faster level of Turbo level. • Press physical Turbo button to switch OC level in Normal level (light off) or Turbo level (light on). • When resume from S3/S4/S5, PredatorSense will sync the OC level from physical Turbo button.

Category	Description
Fan Control	**Provide Fan speed control in Auto, Gaming and Custom mode for fans including, Front fan , Back fan CPU fan and GPU fan. And show the fan speed for fans. On the Custom fan speed, user can adjust the fan speed in percentage.** • Custom fan speed only can control by 60 ~ 100% percentage.
Monitoring	**Provide 3 tabs for CPU and GPU and System.** • Temperature in C • Loading in % • Frequency in MHz • Voltage in V • Download/Upload in bytes/s of WIFI/Ethernet • Usage in GB of RAM

> **Note**
> System will appear abnormal situation or reboot when overclocking(OC)

LED on Motherboard
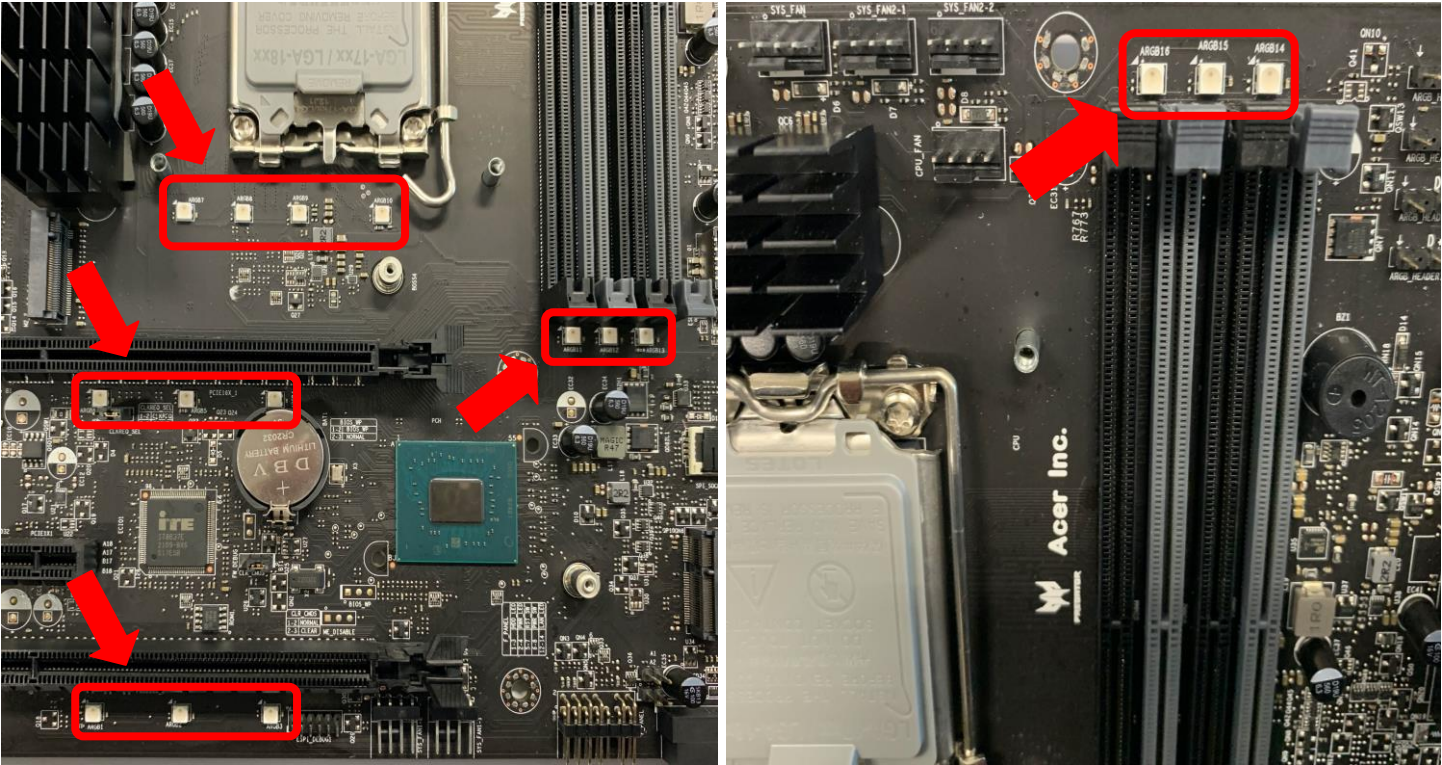
Motherboard LED Settings

- It is recommended that you can turn on/off LED of motherboard according to your lighting effect