



msi[®]

HOW TO UPGRADE YOUR PC WITH A NEW GRAPHICS CARD

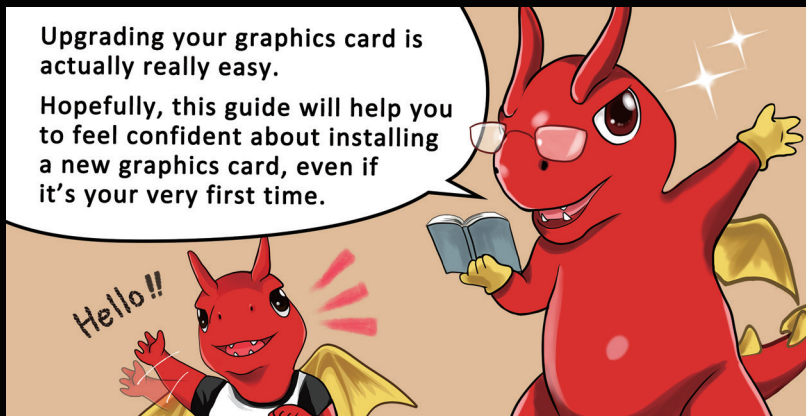


-Hardware And Software Installation Guide -

Upgrading your graphics card is actually really easy.

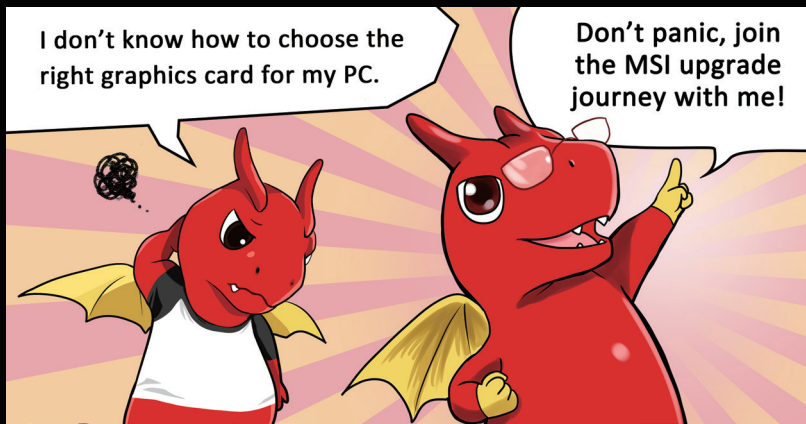
Hopefully, this guide will help you to feel confident about installing a new graphics card, even if it's your very first time.

Hello!!



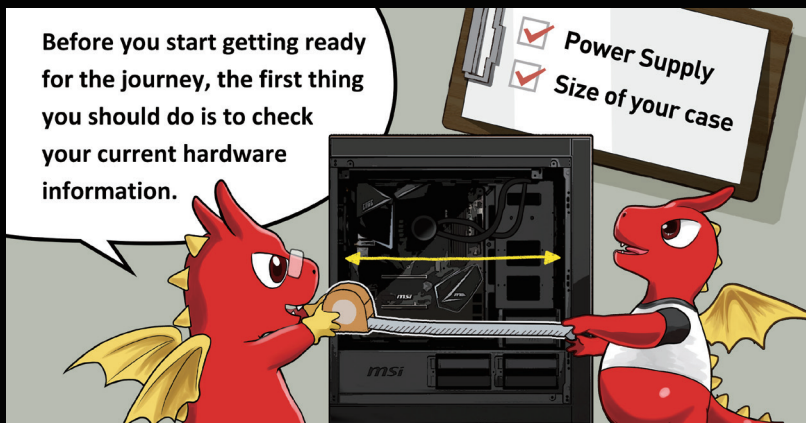
I don't know how to choose the right graphics card for my PC.

Don't panic, join the MSI upgrade journey with me!



Before you start getting ready for the journey, the first thing you should do is to check your current hardware information.

Power Supply
 Size of your case



MSI provides an easy upgrade guide for you to choose the right graphics card!



MSI Beef Up Your Rig



When you finally get your new card, it's time to install it!

YES!



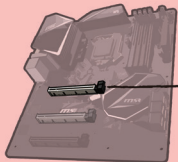
Inside the box you will find your new card and a manual. To reduce waste, we no longer include the Driver CD in the package. It's always recommended to download the latest drivers from the MSI website.

Graphics Card



Manual

PCI-E x16 slot



Monitor



Windows operating system

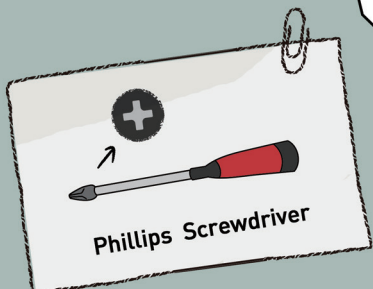


A motherboard with at least one available

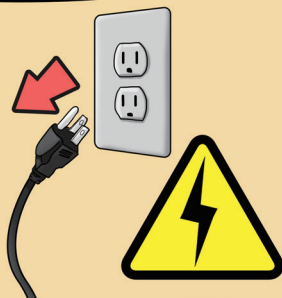
Before we start, you'll need to check for basic compatibility.



For the upgrading process, you'll need a Phillips-head screwdriver and a bit of time.



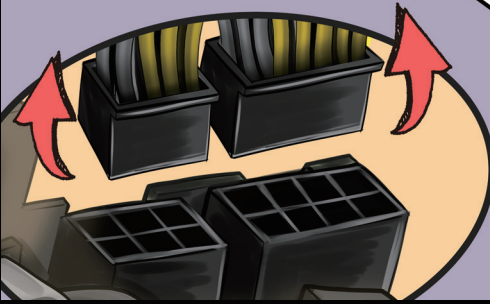
Be sure to turn off your PC and unplug all the cables before you begin.



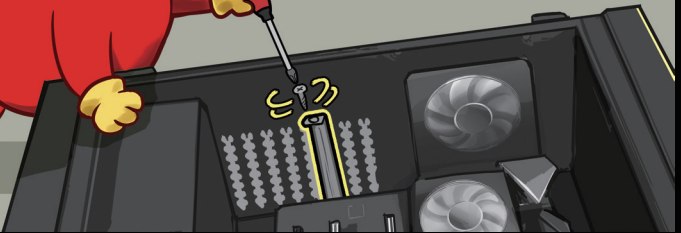
Now it's time to remove the side panel from the case.



First, unplug the power connector from the old graphics card.



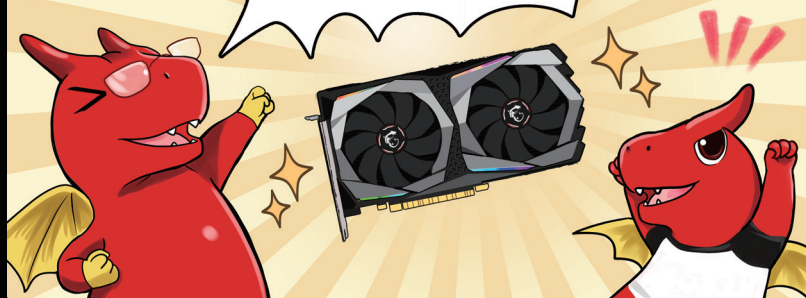
Remove the screws that hold the graphics card in place at the back of your case.



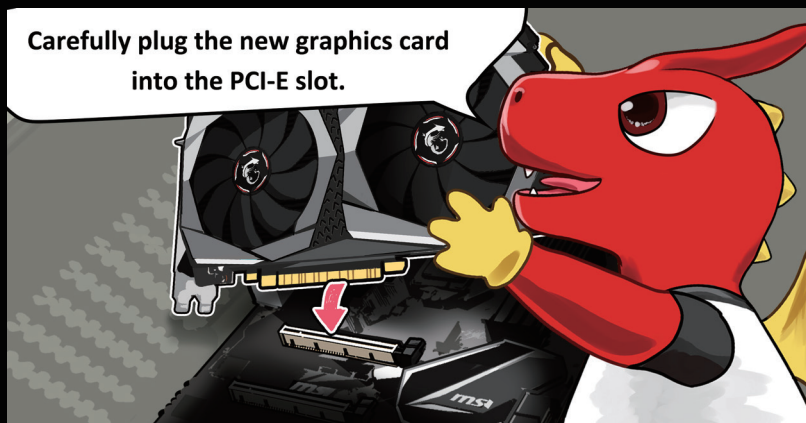
Make sure you release the small plastic latch on the end of the PCI-E slot on your motherboard to unlock your old graphics card. Now you can gently lift the old graphics card out of the case.

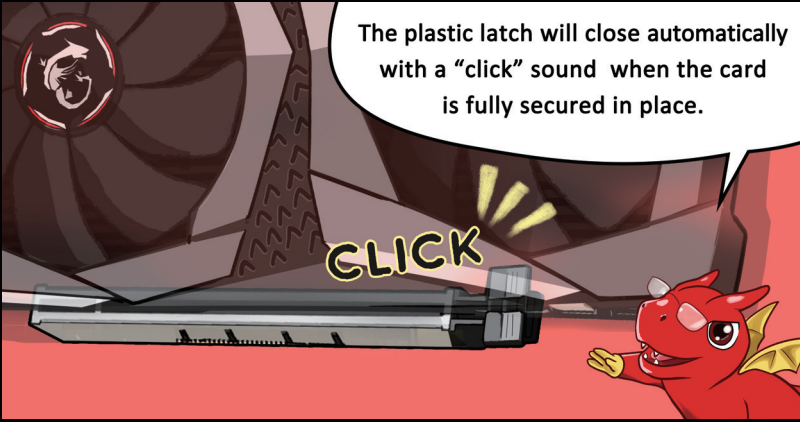


With the old graphics card removed, it's time to install your new graphics card!



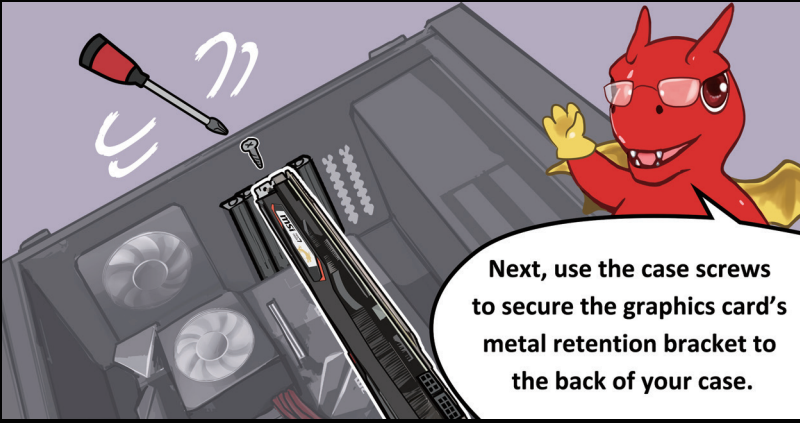
Carefully plug the new graphics card into the PCI-E slot.



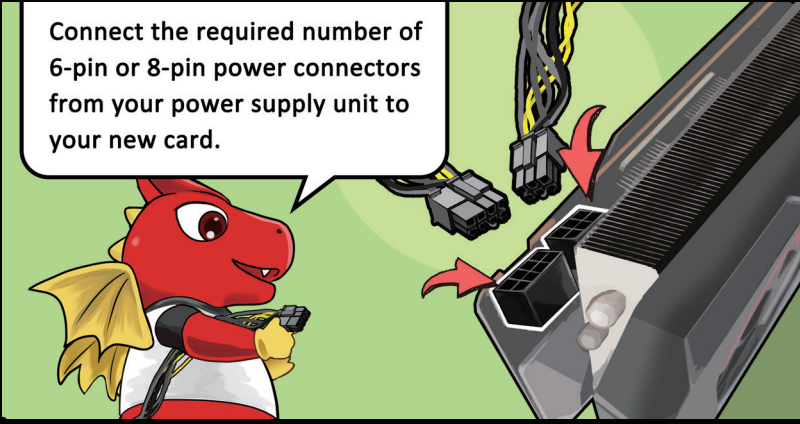


The plastic latch will close automatically with a “click” sound when the card is fully secured in place.

CLICK



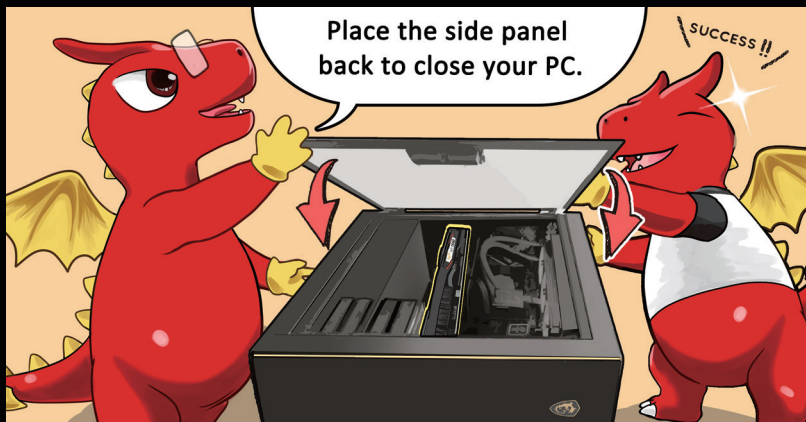
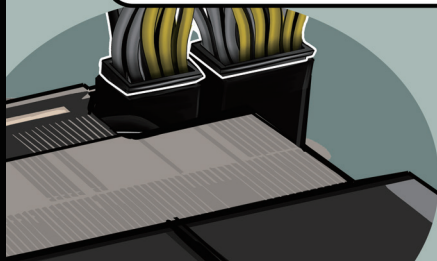
Next, use the case screws to secure the graphics card’s metal retention bracket to the back of your case.



Connect the required number of 6-pin or 8-pin power connectors from your power supply unit to your new card.



If your new graphics card doesn't have any power connectors, it will get all the power it needs from the motherboard.



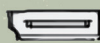
Please pay attention to each specific display output!



DVI-D



DP



HDMI



MINI-DP



USB Type-C



Make sure you plug it into the graphics card, not the motherboard!

Now you will have to plug your display cable into your new graphics card and turn on your computer.



Go to the MSI website, download the latest driver and software for your operating system.



HAPPY GAMING!



MSI AFTERBURNER TUTORIAL



🔍 MSI AFTERBURNER

<https://www.msi.com/page/afterburner>

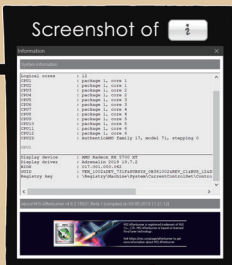
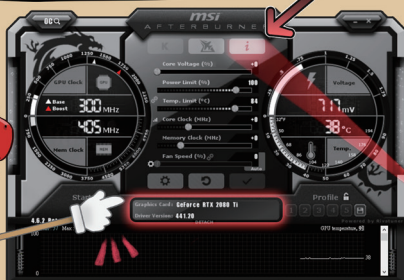


DOWNLOAD



On the MSI website, you can download and install the latest version of MSI Afterburner.

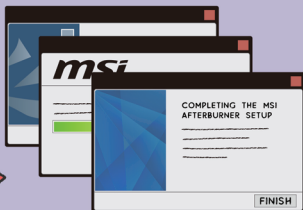
MSI Afterburner gives you detailed control of your graphics card to ensure it performs to its maximum potential.



Once the download is complete, unzip the **MSIAfterburnerSetup.zip** file and follow the installation process.



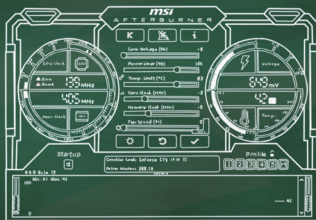
MSIAfterburnerSetup.zip



INSTALLATION PROCESS

During the installation you will also be asked if you want to install RivaTuner Statistics Server, you will need this program if you want to use the On-Screen Display feature.

Before getting a free performance boost with Afterburner, let me introduce the interface and a variety of configuration options!



For NVIDIA graphics cards there are two ways to get more performance by overclocking.

Both are totally safe by the way.

The quick & easy way is called OC Scanner while the more advanced method is manual overclocking.



We'll start with the OC Scanner

By clicking on the icon highlighted on the top left you will open the OC Scanner function. Here you simply click "Scan" and Afterburner will automatically find the highest stable clockspeed for your card. When the process is done, click Apply and your GPU is now running at a higher speed.

```

11:14:36 Connected to MSI Afterburner control interface v2.3
11:14:58 GPU1 : VEN_100EaDEV_1E07aSUBSYS_37151462aREV_A1aBOS_1aDEV_0aFH_0
11:14:58 Memory clock +80MHz
11:14:58 Overvoltage 0 %
11:14:58 Power limit 100%
11:14:58 Thermal limit 84 %
11:14:58 Fan speed 1 Auto
11:14:58 Fan speed 2 Auto
11:14:58 Start scanning, please wait a few minutes
11:15:01 Scanning point 1 of 4
11:19:53 Scanning point 2 of 4
11:31:08 Scanning point 3 of 4
11:36:14 Scanning point 4 of 4
11:42:34 Scan succeeded, average overclock is 124MHz
11:42:34 Dominant limiter
11:42:34 Power
11:42:34 Overclocked curve exported to MSI Afterburner
  
```

OC Scanner

Core Voltage
Power Limit

Core Clock
Memory Clock

Fan Speed

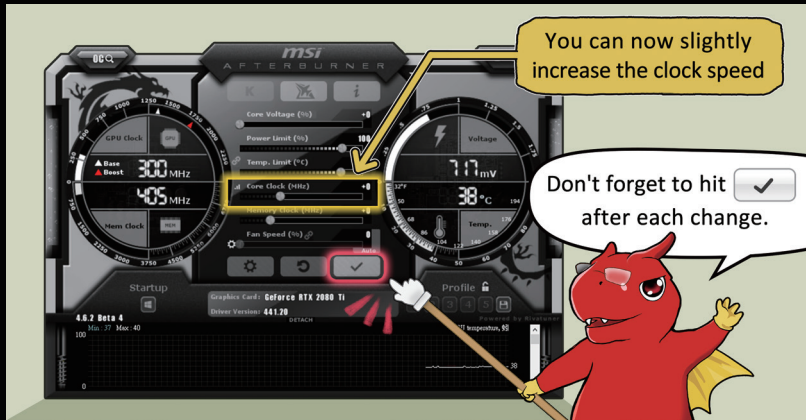
You can reset to default settings anytime by clicking this button.



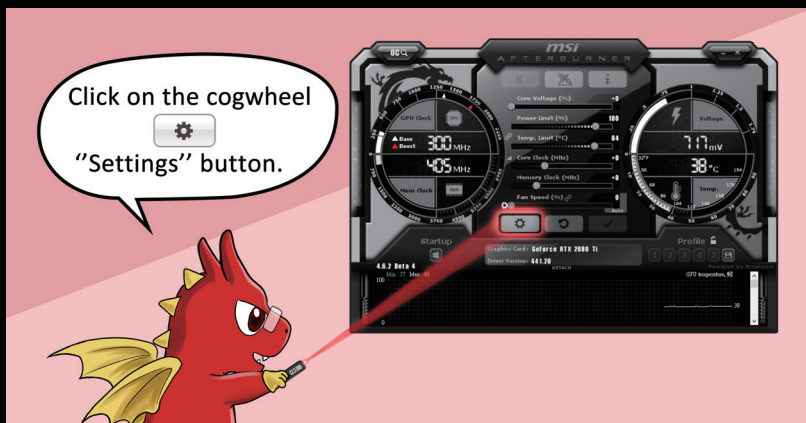
Now we'll show you the basics of manual overclocking.



You can get the perfect balance between performance, temperature and ability by tweaking the clock frequency.



Don't worry if your system crashes or a driver error occurs.
Just reboot it and use a slower clock speed until you find the most stable performance.



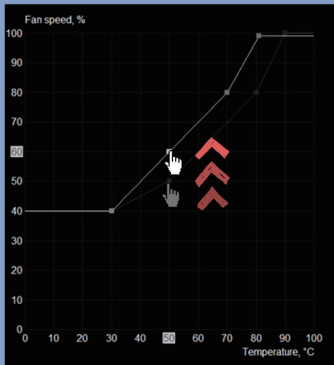
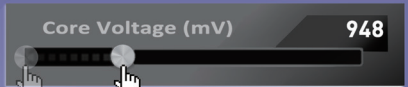


- Unlock voltage control
- Unlock voltage monitoring

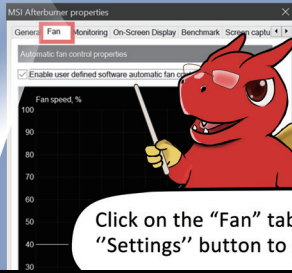


Under the "General" tab, click on "Unlock voltage control" and "Unlock voltage monitoring", this will allow you to increase the core voltage of your graphics card.

DRAG TO INCREASE THE VOLTAGE SLIGHTLY.



You can also modify your fan speed as well to make sure the cooling is at the optimum level when your graphics card heats up during overclocking.



Click on the "Fan" tab in cogwheel "Settings" button to get started.

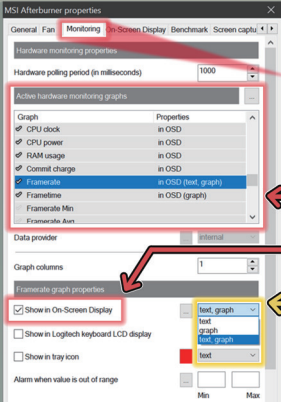
139

GPU 65 °C 1920 MHz 64 % 81 % 46 % 1728 FPS 51 % 1904 FPS
MEM 1743 MB 7000 MHz
CPU 56 % 20 % 4395 MHz 39.9 %
RAM 5701 MB 9106 MHz
03011 139 FPS 7.7 ms



Let's move onto the "On-Screen Display" which provides the real-time information

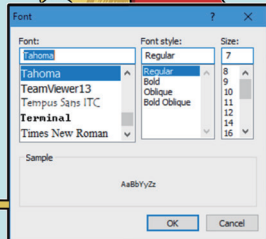
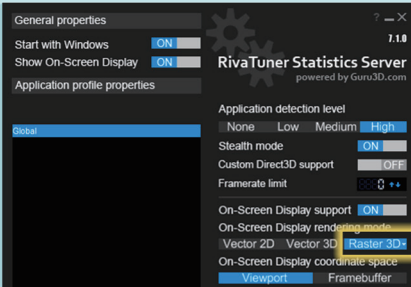
for you to keep a close eye on your system's performance while gaming.

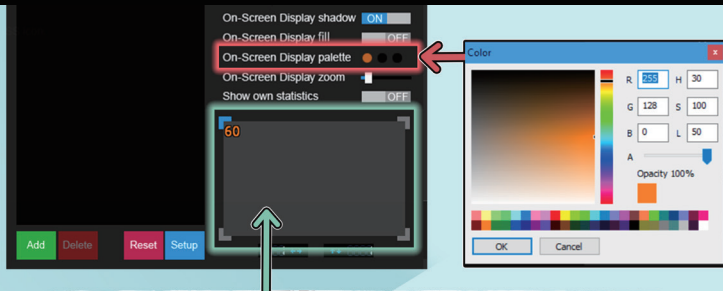


You can find the "Monitoring" tab in Settings.

Tick all the properties you want in your OSD and also tick the "Show In On-Screen Display" checkbox for each item.

You can change the font, font-size and color by setting up the RTSS (RivaTuner Statistics Server).





You can also change the position here to adjust the vertical or horizontal height of the OSD.



條紋碼位置

Part No.G52-XXXX2BF-Q13