

How To and Guides

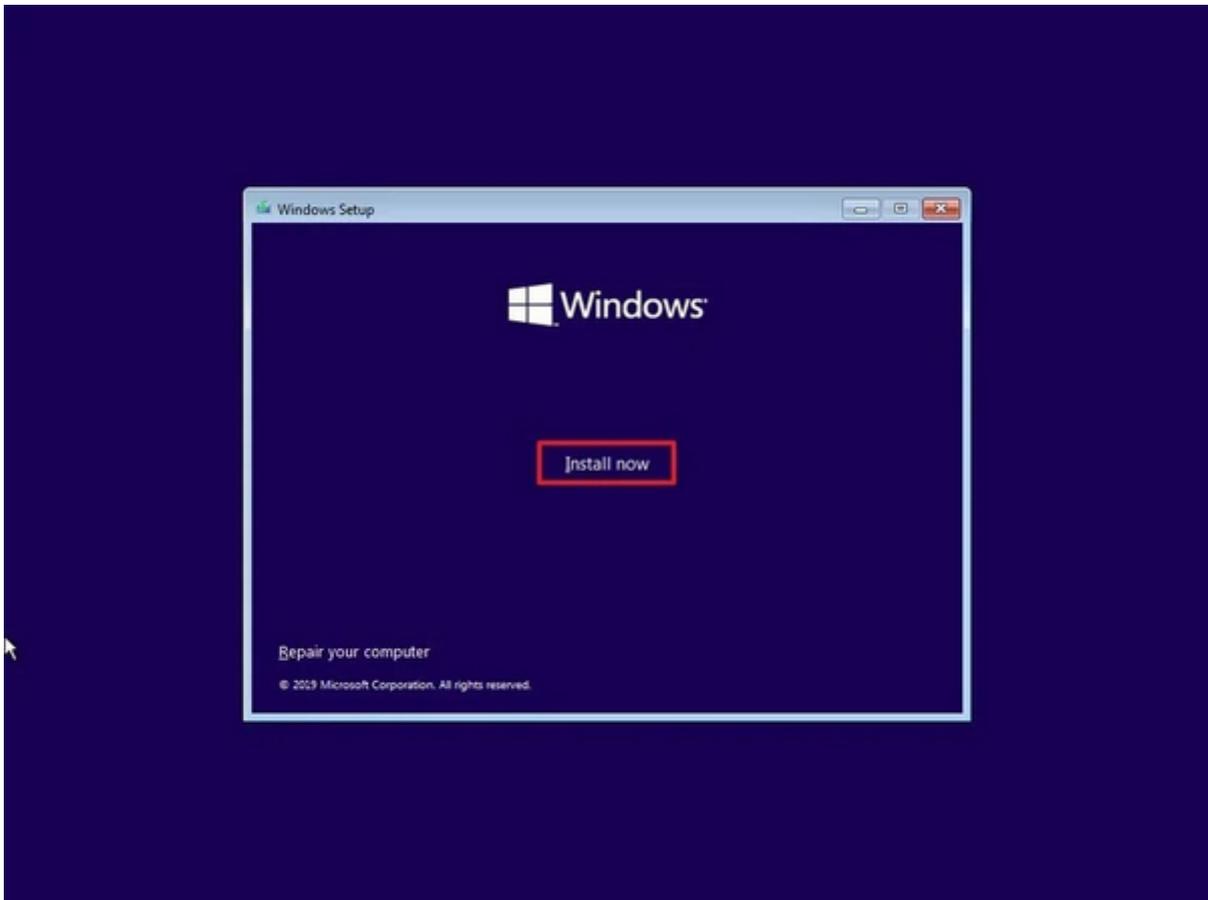
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Clean Installing Windows 10

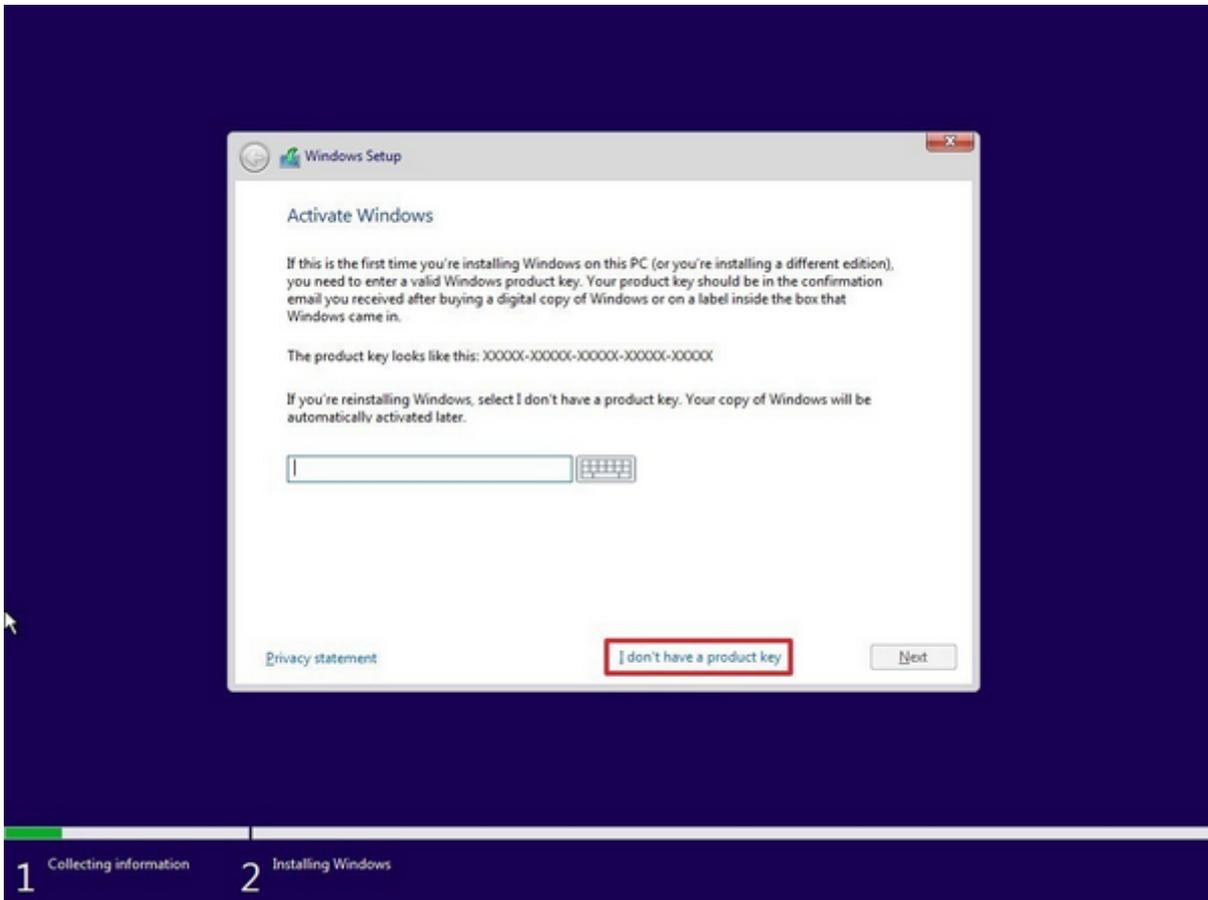
1. Create a bootable USB flash drive using the [Media Creation Tool](#) from Microsoft.

“ If you are re-installing Windows 10, it is best to disconnect all storage drives except from the main (C Drive) drive from the computer installing Windows 10.

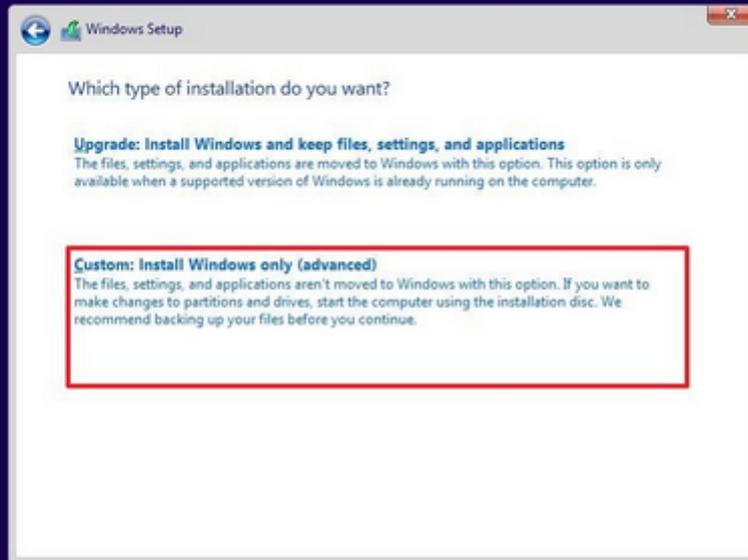
2. Boot into your USB that has the Windows 10 Media on it.
 - *You can do this by entering your systems' BIOS and change the BIOS boot order to have USB media as the first priority (this can usually be found under the boot tab), or simply look for the words "boot menu" when you see your BIOS boot screen, press the corresponding function key and choose the USB flash drive to boot from it.*
3. Follow the steps on screen to install Windows 10.
4. Click Install now



5. Continue on until you hit the license key screen. Here you can either enter your license code or, if Windows has been installed to this computer before, click on the "I don't have a product key" link.

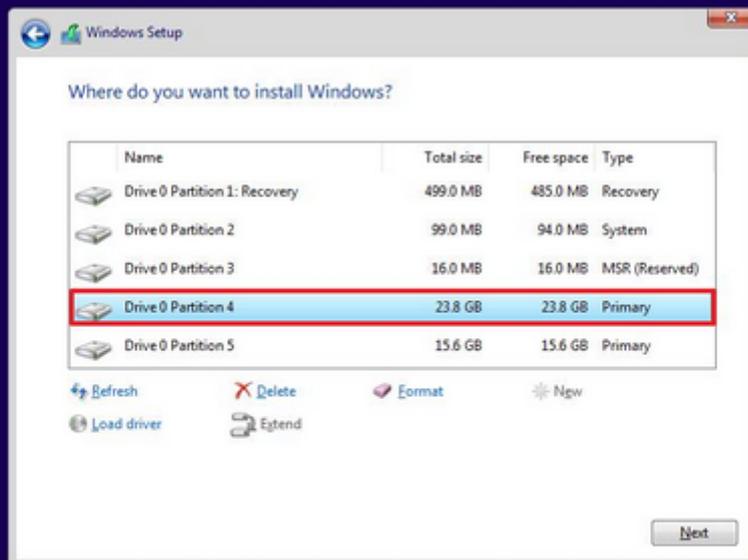


6. Continue on until you hit the "Which type of installation do you want?" screen. Click "Custom".



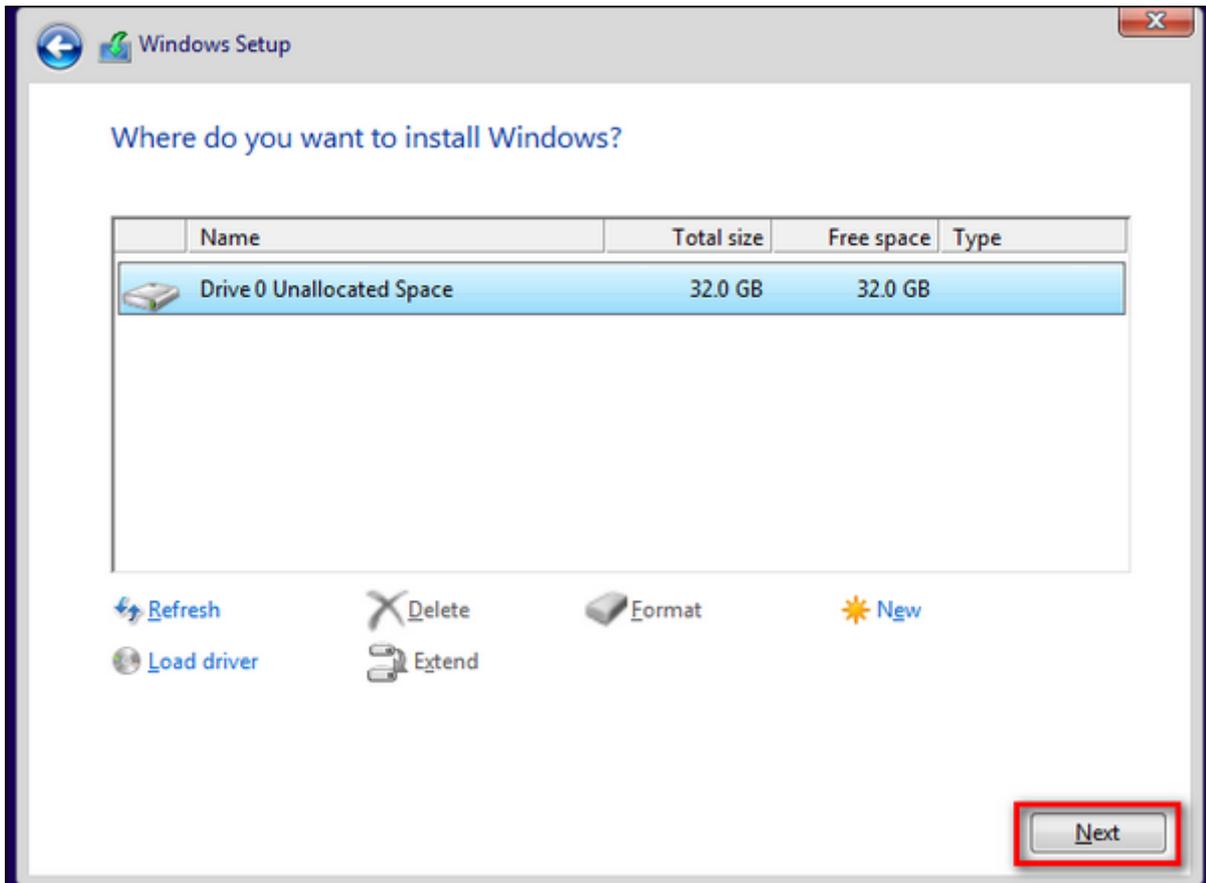
1 Collecting information 2 Installing Windows

7.



1 Collecting information 2 Installing Windows

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8. Windows will now install.
9. Once complete you will be facing the setup screen. Configure as you wish.

You have successfully installed Windows 10.

Killer network drivers

Killer networking drivers and software are known to cause various issues. To troubleshoot follow these steps:

1. Download the [universal drivers](#)
2. Uninstall all Killer software such as the Killer Network Center
3. Install the universal drivers
4. Reboot

Clean Chrome Malware

Chrome is often a vector for malware, if you are facing a stubborn infection do the following.

1. Uninstall Chrome
2. Rename the `chrome` directory in `%LocalAppData%\Google\` to `chrome.bak`
3. Install Chrome, **do not log into chrome**
4. See if issue persists.

Once you sign in, the issue may come back. This points to a synced extension being the issue.

Running Memtest86+

What is a Linux Live Session

Linux is a great OS that has a major advantage when it comes to troubleshooting, it can be run from a USB flashdrive in a 'live' state without installing to a hard disk. This allows you to use a wide range of tools to manipulate the disks, data, and hardware of your computer/OS without worrying about anything running on it.

Obtaining media

r/Techsupport Rescue Media

A Linux ISO has been made for r/Techsupport that has memtest86+ included in the environment.

[Download](#)

[Source files for Debian live-build](#)

Official Memtest86+ V5.31b

You may also use the official Memtest86+ ISO.

[Download](#)

Creating bootable media

This will require a USB that is at least the size of the ISO you downloaded.

All methods of creating boot media are destructive and will WIPE the USB flasdrive or external disk.

Windows

1. Download and run [Rufus](#)
2. Select "ISO Image" and then browse for the ISO image.
3. Select which flash drive you want to put the installer on.
4. Select the target system type, `GPT/UEFI` or `MBR/BIOS`
 - For modern systems `GPT/UEFI` is preferred. For legacy systems use `MBR/BIOS`
5. Click "Start" and wait for it to finish.

MacOS

1. Download and run [Etcher](#)
2. Select your downloaded ISO
3. Select your target drive
4. Click "Flash" and wait for it to finish.

Linux

1. Run `lsblk` to list all disks in your system, identify your flash drive by size. It will look something like `/dev/sd[letter]`

Boot the live media

1. Press your 'Boot menu' key when you power on the machine to access your boot options.
 - You may need to go through BIOS and change boot priority if you cannot find or hit the boot options key during boot.
2. Choose your USB
3. Once it boots select 'Try' or 'Live'

Run Memtest86+

Both of these media need to be booted in Legacy/CSM mode. They will not work when loaded in UEFI mode

rTechsupport Rescue Media

If you booted the rTechSupport Rescue Media then you will be able to choose Memtest86+ on the welcome screen.



Official Memtest86+ media

If you used the official Memtest86+ media, it will boot straight into the test.

Results

Let the test run for 8 passes, most likely over night, any errors means means you have a bad RAM stick or DIMM (RAM slot). If you see any errors early you can end the test there and start narrowing it down to which stick/slot.

If you have a failure then test each stick individually, and in different slots to isolate the failure to a stick or slot.

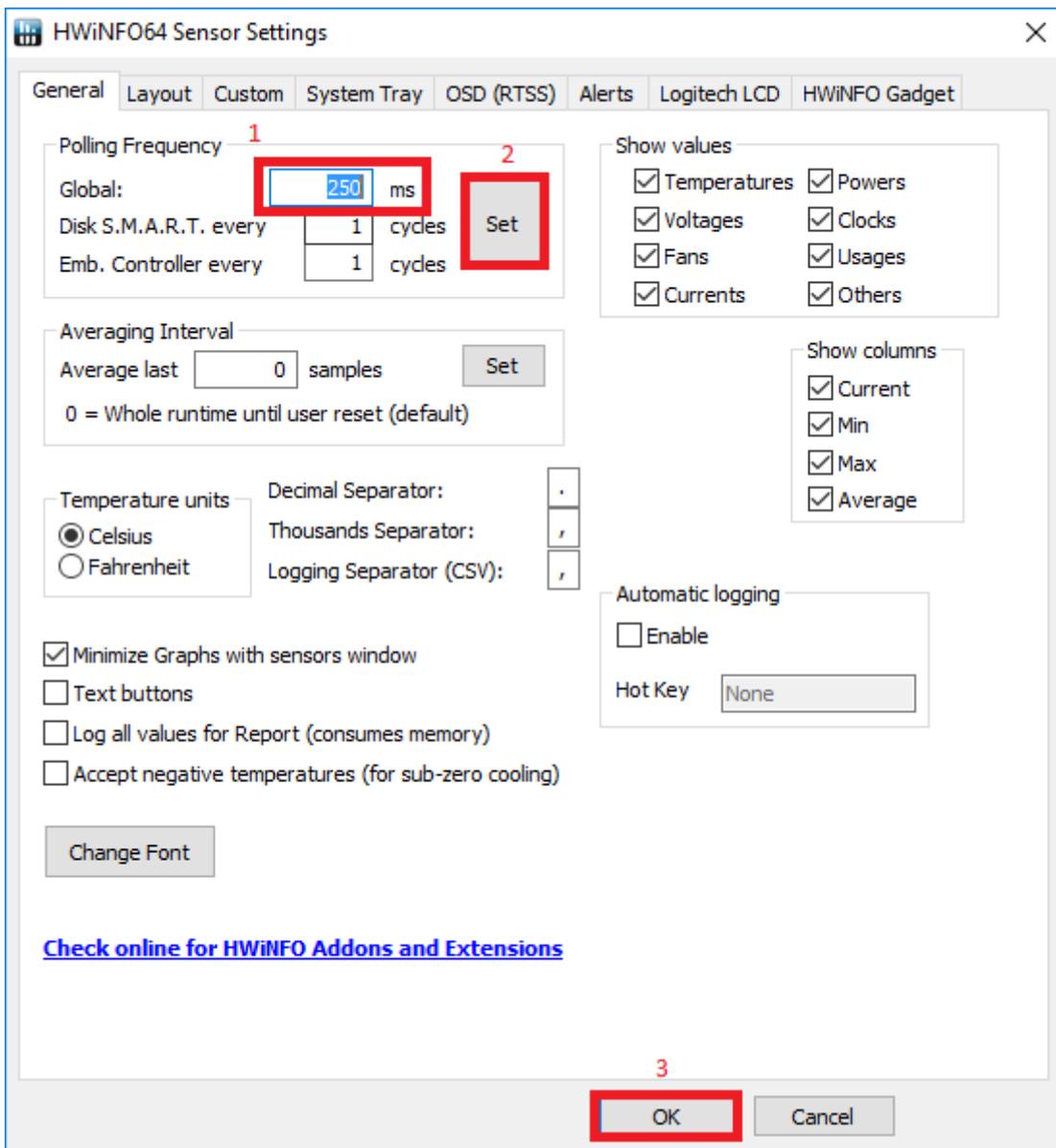
HWiNFO - Full Guide

To start troubleshooting using HWiNFO, follow this guide. It will walk you through how to setup logging and stress testing.

1. Download HWiNFO from [Here](#)
2. Download Prime95 from [Here](#)
3. Download Furmark from [Here](#)
4. Start HWiNFO and launch it in sensors only mode



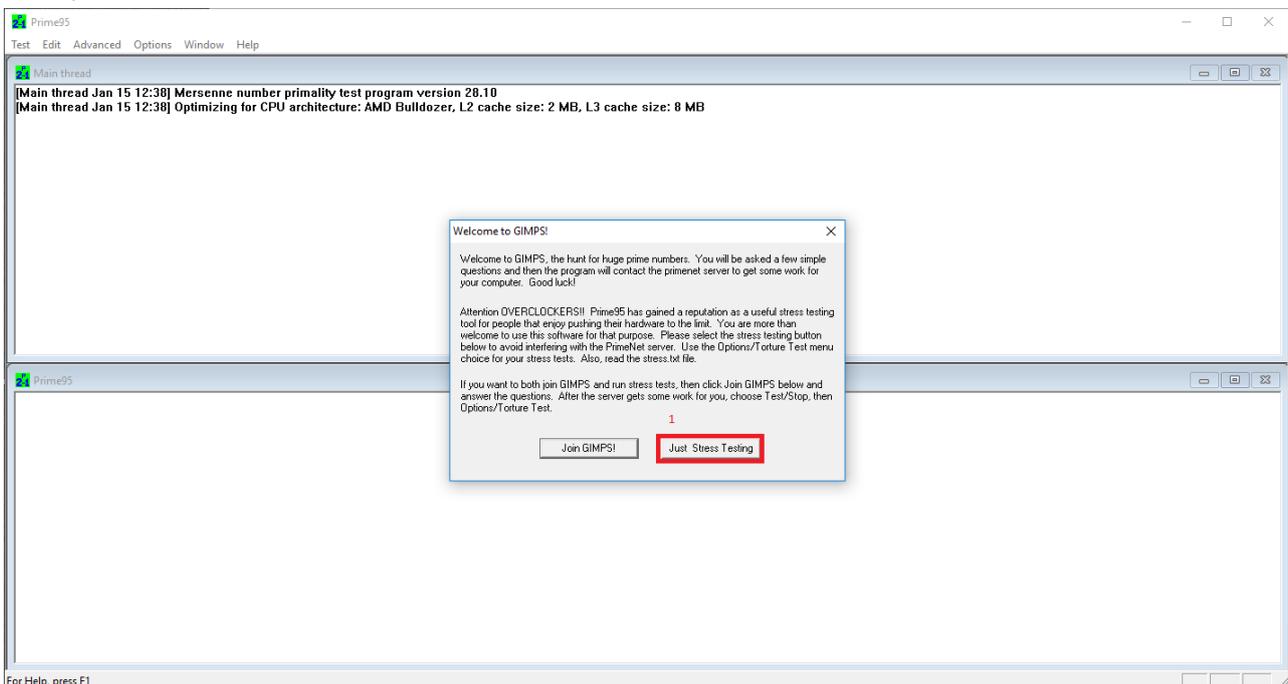
5. In the sensors only mode window, go to settings and set the global polling frequency to 250 ms and press ok



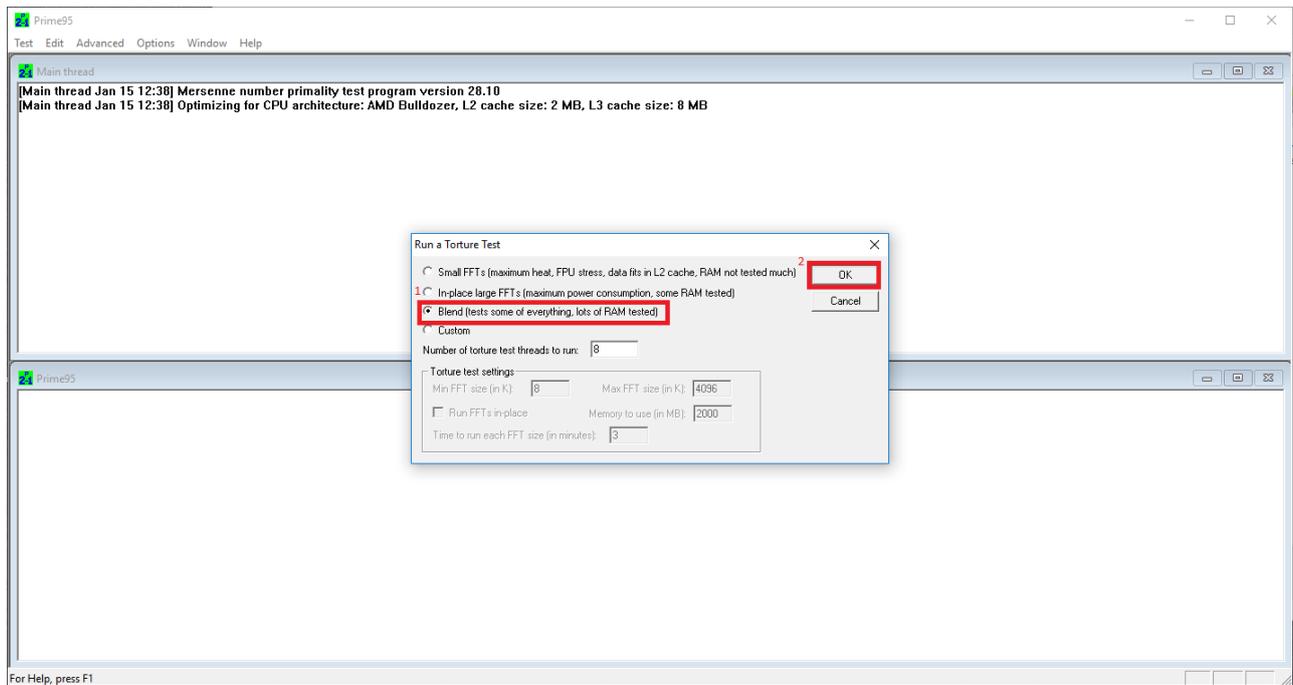
6. Start the logging process by clicking the green + with the paper icon and save a csv file

Sensor	Current	Minimum	Maximum	Average
System: MSI MS-7693				
Virtual Memory Com...	3,854 MB	3,811 MB	3,854 MB	3,827 MB
Virtual Memory Avai...	14,909 MB	14,909 MB	14,952 MB	14,936 MB
Virtual Memory Load	20.5 %	20.3 %	20.5 %	20.4 %
Physical Memory Used	3,246 MB	3,197 MB	3,247 MB	3,214 MB
Physical Memory Av...	13,085 MB	13,085 MB	13,134 MB	13,118 MB
Physical Memory Load	19.8 %	19.5 %	19.8 %	19.6 %
Page File Usage	0.2 %	0.2 %	0.2 %	0.2 %
CPU [#0]: AMD FX-...				
Core #0 VID	1.425 V	1.413 V	1.425 V	1.420 V
Core #1 VID	1.425 V	1.413 V	1.425 V	1.420 V
Core #2 VID	1.425 V	1.413 V	1.425 V	1.420 V
Core #3 VID	1.413 V	1.413 V	1.425 V	1.420 V
Core #4 VID	1.413 V	1.413 V	1.425 V	1.418 V
Core #5 VID	1.425 V	0.912 V	1.425 V	1.376 V
Core #6 VID	1.425 V	0.912 V	1.425 V	1.376 V
Core #7 VID	1.425 V	1.413 V	1.425 V	1.419 V
NB VID	1.200 V	1.200 V	1.200 V	1.200 V
Core #0 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,300.2 MHz
Core #1 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,300.2 MHz
Core #2 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,300.2 MHz
Core #3 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,300.2 MHz
Core #4 Clock	4,100.3 MHz	1,400.1 MHz	4,100.3 MHz	2,525.2 MHz
Core #5 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,300.2 MHz
Core #6 Clock	1,400.1 MHz	1,400.1 MHz	4,100.3 MHz	2,525.2 MHz
Core #7 Clock	1,400.1 MHz	1,400.1 MHz	4,300.3 MHz	2,541.8 MHz
Bus Clock	200.0 MHz	200.0 MHz	200.0 MHz	200.0 MHz
NB Clock	2,200.2 MHz	2,200.1 MHz	2,200.2 MHz	2,200.1 MHz
HT Clock	2,400.2 MHz	2,400.1 MHz	2,400.2 MHz	2,400.2 MHz
Core #0 Usage	6.4 %	0.0 %	36.6 %	7.7 %
Core #1 Usage	3.0 %	0.0 %	13.3 %	2.4 %

7. Next, launch Prime95



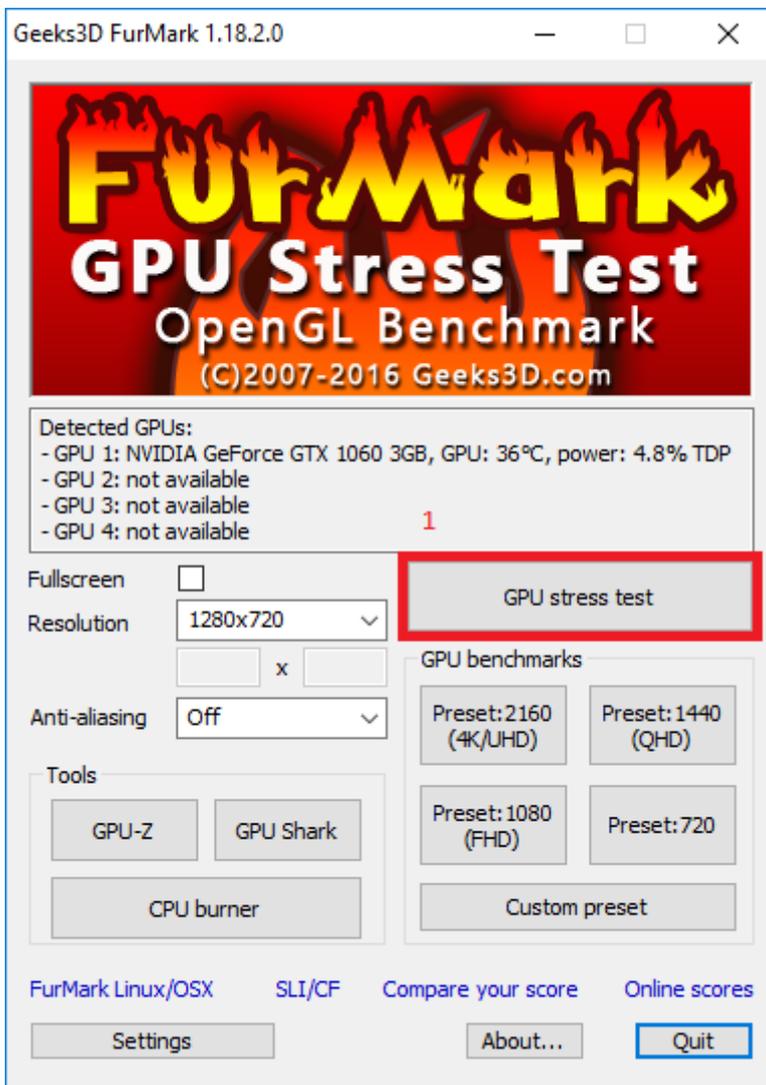
8. and start the blend test



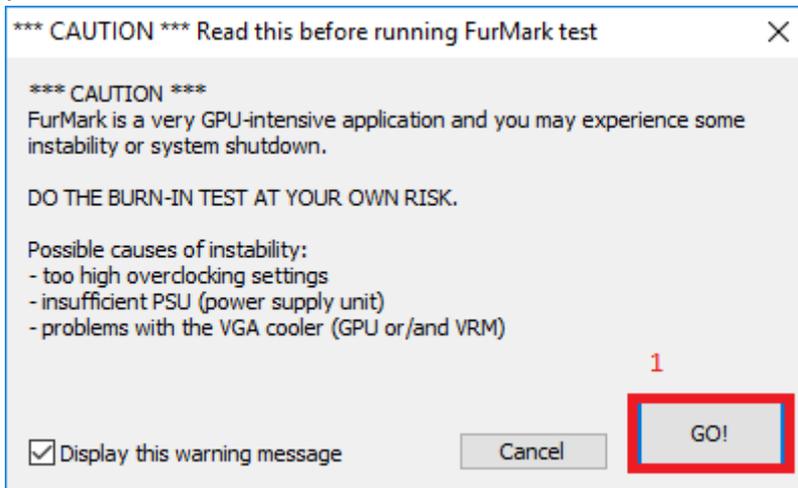
9. it will look like this when started



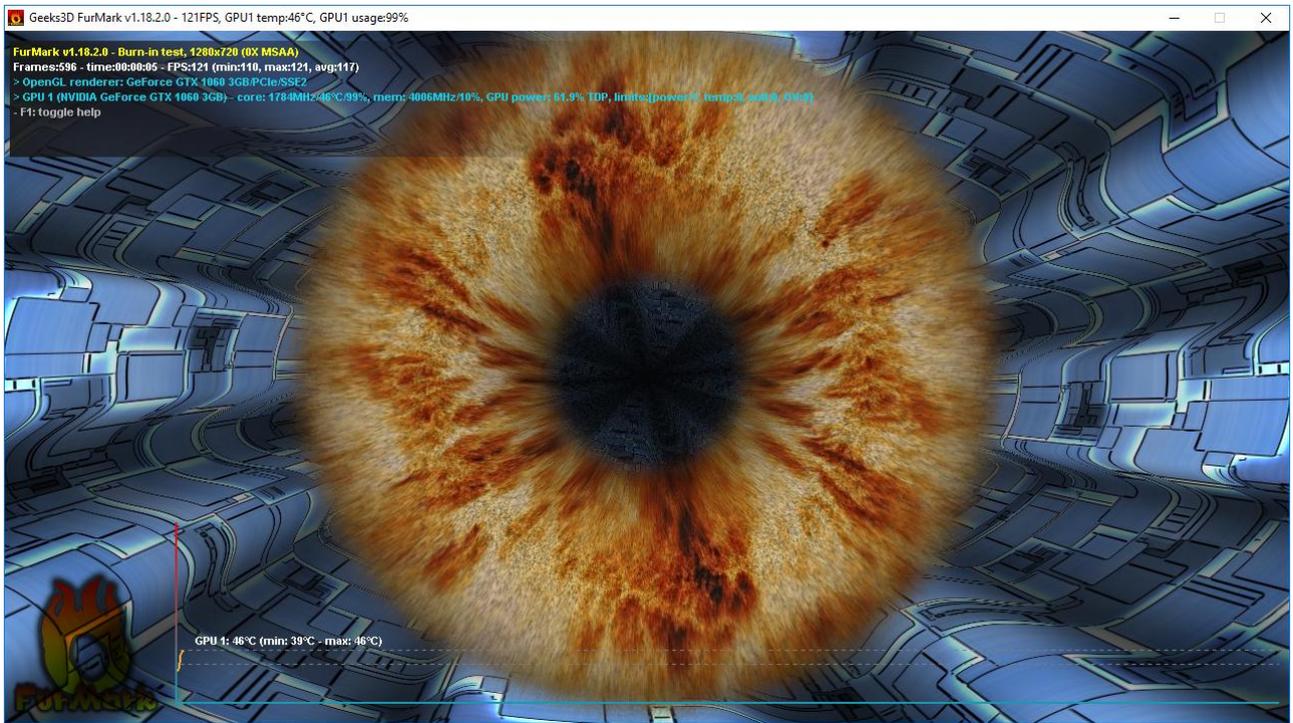
8. Start Furmark and select the GPU Stress Test



9. press GO



10. it will look like this when started



Make sure it's a 10 minute or more sample for accurate results

How to Describe a Technical Problem

You are facing a technical problem and want to resolve it. That's why you went on /r/techsupport in the first place.

If the AutoModerator redirected you here, that would mean your post may lack sufficient information techs need to know.

Follow the four steps shown here for a successful /r/techsupport post:

Step 1: Think About Your Problem

You may know what your problem is, but you need to think about it carefully. These questions will help you:

When does the problem occur? Does it only occur when you do certain things? Where does the problem occur? Is it a hardware or software problem? Does it occur only in one program? For how long has it been that way? Did it start after installing software or hardware? What has changed? What have I already tried? Has it affected the problem positively or negatively, or not at all? What haven't I tried? There is no such thing as "I've tried everything". These questions might even help you solve your issue yourself. If not, include any relevant ones in your post.

Step 2: Gather Information

Gather general information about your system or device. These are extremely important for a tech to know. Not all details are relevant to your problem, but adding as much information to your post as you can doesn't hurt:

Operating System (Windows 10, Android, MacOS, which version is it?) Device (Smartphone, Computer, Laptop, which model is it?) Application (one application? multiple? which version do you have?) Specs (System specs like RAM, CPU, GPU, etc, include even if you include the device model) Please refer to our System Dossier article for details: <https://rtechsupport.org/kb/system->

dossier/

Step 3: Choose a title

Your title should be descriptive. Here are some examples of really bad titles: “I have a problem”, “help”, “I’ve been trying for hours and this problem is still here oh no I’m running out of character”

Examples of good titles are: “Windows 10 shows ‘unable to boot from harddrive’ “, “Android has red icon on top left corner”, “Outlook doesn’t sync anymore”.

The title should be a tiny summary of your post. Just enough that a tech will know what it is roughly about.

Step 4: Conclusions

Read through our Wiki - <https://rtech.support/>

After reading these articles, go ahead and start writing your post. It should include your problem (with all the information from Step 1), your specs from Step 2, and what you have tried so far.

Understand that the techs are here because they like to help. And if you piss them off, they’re gone. None of the techs gets paid by anyone and they have no obligation to you. Please be nice to them and always answer all questions. These steps will make it easier for a tech to help you (and they are more willing to). Describe your problem precisely and you’ll get a good answer.

And if your post doesn’t get the attention you’d like it to have, do not repost immediately. Wait a day or so for that.

DISM and SFC

All commands require an admin CMD or Powershell

Using SFC

SFC is a basic command to check and repair minor OS corruption.

In CMD or Powershell run:

```
sfc /scannow
```

Using DISM without a source

DISM is a larger command, that can do much more to repair broken parts of an OS.

In CMD or Powershell run:

1. To check for issues

```
DISM /Online /Cleanup-Image /CheckHealth
```

2. To check for deeper issues

```
DISM /Online /Cleanup-Image /ScanHealth
```

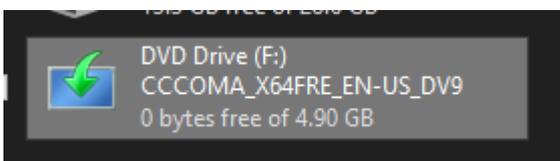
3. To resolve issues

```
DISM /Online /Cleanup-Image /RestoreHealth
```

Using DISM with a source WIM (from an ISO)

DISM normally uses an Online source to repair your system, sometimes this leads to errors. You can use a Windows 10 ISO to get a 'clean' source locally. Download the ISO using the [Windows media creation tool](#)

Double click the downloaded ISO to mount it and note its drive letter in 'This PC'



In CMD or Powershell run:

1. Repair issues with your local source

```
DISM /Online /Cleanup-Image /RestoreHealth /Source:F:\Sources\install.wim
```

Using Indices

For Windows server you may need to look into using a specific index of the WIM

1. Check a WIMs indices with

- Powershell `Get-WindowsImage -ImagePath F:\sources\install.wim`

- CMD `dism /Get-WimInfo /WimFile:F:\sources\install.wim`

2. Use the index to run a repair against your specific OS type

```
DISM /Online /Cleanup-Image /RestoreHealth /Source:wim:F:\Sources\install.wim:1
```