BootcampDrivers.com

READ ME FIRST

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INSTALL GUIDE

Ensure that Windows is fully up-to-date. Drivers require at least Windows 10 Anniversary Edition, 8.1 or 7 SP1.

 Open the downloaded ZIP file and click 'Extract All' in Windows Explorer. Choose a location to extract the files on the next screen.



- 2) Open 'DDU v... .exe' and extract the files into the driver folder.
- Run 'Display Driver Uninstaller.exe', clicking 'Yes' to allow permission for changes if prompted.
 On launch, if you see the window on the right, click 'Yes' to visit the website and download the latest version before continuing.

Display Dr	iver Uninstaller		×
i	Updates are availab	ble! Visit DDU	website now?
	Yes	No	Cancel

4) DDU no longer gives you the option to boot into safe mode from within the software. So once DDU is up-todate, you need to hold the shift key whilst clicking on 'Restart' from the start menu. When you've arrived at a blue screen (Windows 10), click on the following buttons:

Troubleshoot -> Advanced settings -> Startup settings -> Restart

Your computer will now restart. Remember to hold the option key down otherwise it may boot back into macOS.

5) When the computer has rebooted, choose 'Safe Mode' (press 4) to finish booting into safe mode, then open DDU. Click 'Clean and restart' to remove your current graphics driver. The computer will restart again automatically once completed.

Display Driver Uninstaller (DDU)	- □ >	×
Options Links Extended log Info		
Detected operating system: Windows 10 (x64)		
Clean and restart (Highly recommended)		
Clean and do NOT restart (May cause issues like black screen)	RADEON	
Clean and shutdown (For installing a new graphics card)	GRAPHICS	
	AMD	~
	Selected graphics driver	

6) Once rebooted, open Device Manager (e.g. type 'Device Manager' into the search bar), and check that under 'Display adapters' it shows 'Microsoft Basic Display Adapter'. The graphics driver uninstall was successful.

=		Filters 🗸	🛃 Device Manager
			<u>File Action View Help</u>
ŵ	Best match		🗢 🔿 🖬 📓 🖬 💭
0	Control panel		iMac_Windows if Audio inputs and outputs
			> 🚯 Bluetooth
	Settings	>	> 💻 Computer
	Indate device drivers		> Disk drives
	Se opulie device divers		🗸 🏣 Display adapters
	Search suggestions	>	Microsoft Basic Display Adapter
	0 1 3		> 🛺 Human Interface Devices
	Device manager - Search the web		> 📷 IDE ATA/ATAPI controllers
			>
			> 🚡 Imaging devices
			> Keyboards
			> Mice and other pointing devices
			> 📲 Modems
			> Monitors
			V 🕎 Network adapters
			Bluetooth Device (Personal Area Network)
			Bluetooth Device (RFCOMM Protocol TDI)
			Broadcom 802.11ac Network Adapter
ႏၱု			Broadcom NetXtreme Gigabit Ethernet
			✓ M Other devices
			🕰 iLok
Č.			SMS/MMS
	0.5		> Portable Devices
	> Device Manager		> Print queues
			Processor

- 7) Now we are ready to install the new drivers. Click 'Setup.exe' in the driver folder to begin, clicking 'Yes' to allow permission for changes if prompted. Click 'Express Install' for a quick installation, or choose 'Custom Install' to select individual components to install.
- 8) Towards the end of installation, you will get an opportunity to install Radeon Relive. Click 'Install Radeon ReLive' if you wish to do so, or 'Skip' to finish the installation without installing ReLive.

Note: Clicking on 'Install Radeon ReLive' can cause the installer to crash for a small number of users. If this happens to you, simply restart and install ReLive from within the Radeon Crimson software itself under the 'ReLive' tab at the bottom. The drivers themselves should still have installed correctly, as well as all other software components.

9) Once installation is complete, make sure that the checkbox for 'Keep system up-to-date' is NOT ticked. Restart your computer before you start using the new driver. Open device manager again in the same way as step 6) to see if the driver is working properly.

To install future updates to the modified driver, simply repeat the steps above.

In order to restore full OpenCL capabilities to your card, open 'Install-OpenCL-AMD-SDK-v1.4.87.exe' to install the SDK.

Some versions may require you to install DLighterSetup.exe provided with the package to restore brightness controls. Restart to macOS and set your brightness to maximum, then you can dial the brightness down or up using this Desktop Lighter application on Windows (going above 75% on the slider makes the contrast look washed out so avoid doing this). See the BootcampDrivers.com forum for more information.

Note: If the installation fails at the end with a message that is similar to the following...

AMDZI S	O F T W A R E	16.60.2711 driver has been partially installe during the installation of the AMD softw	d. Error 1603 - A general error has occurred vare package. <u>Click here to learn more</u> .		-	×
Custo	omer Support	View Log	Restart Now	Close		

... then you need to install the provided certificate so that the installer trusts the modified driver. If you are not on the Anniversary edition or later of Windows 10 then you may also see the above message until you update.

To install the provided certificate, follow these instructions:

1) Open the file 'addtrustexternalcaroot_kmod.crt'

📕 Bin64	07/03/2017 16:33	File folder	
📕 Config	07/03/2017 16:33	File folder	
FREE MUSIC	21/12/2016 15:05	File folder	
📙 Images	07/03/2017 16:33	File folder	
📙 Packages	07/03/2017 16:33	File folder	
Test mode files	21/12/2016 15:05	File folder	
	24/42/2246 45 02	Convito Contificato	2 KB
addtrustexternalcaroot_kmod	21/12/2016 15:02	Security Certificate	2 KD
addtrustexternalcaroot_kmod	07/03/2017 16:55	Application	2 кы 1,113 КВ
Image: Second state of the second s	07/03/2017 16:55 21/12/2016 15:02	Application Application	1,113 KB 3,800 KB
addtrustexternalcaroot_kmod Image: state st	07/03/2017 16:55 21/12/2016 15:02 04/10/2013 22:08	Application Application Application extension	1,113 KB 3,800 KB 4,346 KB
addtrustexternalcaroot_kmod Image: constraint of the second sec	07/03/2017 16:55 21/12/2016 15:02 04/10/2013 22:08 04/10/2013 22:08	Application Application Application extension Application extension	1,113 KB 3,800 KB 4,346 KB 445 KB
addtrustexternalcaroot_kmod Install-OpenCL-AMD-SDK-v1.4.87 mfc120u.dll msvcp120.dll msvcr120.dll	07/03/2017 16:55 21/12/2016 15:02 04/10/2013 22:08 04/10/2013 22:08 04/10/2013 22:08	Application Application Application extension Application extension Application extension	1,113 KB 3,800 KB 4,346 KB 445 KB 949 KB
addtrustexternalcaroot_kmod Install-OpenCL-AMD-SDK-v1.4.87 mfc120u.dll msvcp120.dll Radeon settings fix	07/03/2017 16:55 21/12/2016 15:02 04/10/2013 22:08 04/10/2013 22:08 04/10/2013 22:08 21/12/2016 15:02	Application Application Application extension Application extension Application extension Windows Batch File	1,113 KB 3,800 KB 4,346 KB 445 KB 949 KB 1 KB

2) Click the 'Install Certificate...' button, then on the next window select 'Local Machine' and click 'Next'

R Certificate	X
General Details Certification Path	 Ertificate Import Wizard
Certificate Information	Welcome to the Certificate Import Wizard
Windows does not have enough information to verify this certificate.	
	This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.
	A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.
Issued to: AddTrust External CA Root	Store Location
Issued by: Microsoft Code Verification Root	
Valid from 15/08/2013 to 15/08/2023	To continue, dick Next.
Install Certificate Issuer Statement	
OK	Cancel

3) Allow for User Account Control to make changes if you are prompted, then on the next window click 'Place all certificates in the following store' and click 'Browse...'. Then select 'Trusted Root Certification Authorities' in the next window and click 'OK' and then 'Next' on the other window.



4) Click 'Finish' in the final window to complete the certificate installation. Then run setup.exe again.

OTHER POSSIBLE INSTALLER ISSUES

- If Windows starts randomly installing the old driver again after a few hours, please visit the following link where you will need to download the file 'wushowhide.diagcab' and follow the instructions on that page: <u>https://support.microsoft.com/en-us/kb/3073930</u>
- AMD Radeon settings may not detect the core and memory clock speed on your graphics card. This can cause
 older games to not work properly as they fail to detect sufficient video ram amongst other things. This is
 because on occasion I have to modify the drivers further to restore functionality e.g. brightness controls. Future
 updates from AMD will hopefully restore full official functionality in this case, but I need your help to submit bug
 reports otherwise they won't fix it!

OLD 'TEST MODE' METHOD OF INSTALLING THE DRIVERS

This is not recommended as it allows the installation of any unsigned drivers which could contain malware, so proceed with caution! Some games may also refuse to run if you are in test mode.

1) Open the 'Test mode files' folder and run 'enable testmode.bat' as an administrator by right-clicking on it and selecting 'Run as Administrator'.

🖲 disable testmode	21/12/2016 15:02	Windows Batch File	1 KB
💁 enable testmode	21/12/2016 15:02	Windows Batch File	1 KB
📭 watermark disabler	21/12/2016 15:02	Application	610 KB

- 2) If prompted, allow the file to make changes to your computer, then let the script run. Check to see if it was successful, then restart your computer.
- 3) Windows will now be permanently in test mode on each bootup. Run setup.exe to install the drivers as unsigned drivers. Then run 'watermark disabler.exe' if you wish to remove the 'Test Mode' watermark on the bottom-right of the screen. Finally, restart your computer.

Note: To disable test mode simply run the script 'disable testmode.bat' as an administrator by right-clicking on it and selecting 'Run as Administrator', then restart your computer for changes to take effect.

If you have any other issues please let me know in the forum or in the chatroom on the website. Please consider donating to help us with website running costs. Thanks and enjoy!

Please see the website for F.A.Q.s and known issues with the driver.

OVERCLOCKING

Disclaimer: This a guide only and the values here are what I have found suitable for an M295X graphics card in an iMac 5k from 2014. Different mac models and graphics cards will have different overclocking limits. See the forum for other user's guides to overclocking with their graphics cards. Otherwise it is mostly trial and error!

What you need:

• MSI Afterburner or AMD Overdrive

MSI Afterburner available for download at: https://www.msi.com/page/afterburner

MacsFanControl

Available for download at: https://www.crystalidea.com/macs-fan-control

MACSFANCONTROL INSTRUCTIONS

- Download MacsFanControl. Run the setup and restart your computer.
- Once you're back on the desktop, click into the notifications bar on the bottom-right, right-click on the MacsFanControl icon and select 'Show MacsFanControl'.



• In the window that appears, click on the text next to 'Auto' as shown below (bottom left), then ensure you have the following settings applied as shown below (bottom right). This will make the fans ramp up much more aggressively than with stock Apple firmware, allowing for maximum overclocking potential.

				🇱 Fan control for 'Main' fan'	×
🔳 Macs Fan	Control 1.4.7 (iMac15,1)				
Available fans:					
Fan	Min/Current/Max RPM		Control	Sensor-based value Imm GPU Diode	
Main	1200 — 1196 — 2700	Auto	Based on GPU Diode	Temperature that fan speed will start to increase from:	67 🗘 °C
				Maximum temperature:	75 🖨 °C
				ОК	Cancel

MSI AFTERBURNER INSTRUCTIONS

- Download MSI Afterburner. Run the setup and restart your computer.
- Open MSI Afterburner, then click on the settings button (this can vary where it is located based on which version or skin you are using).
- In the MSI Afterburner properties window that appears, ensure your settings match the following by ticking the unticked boxes as shown below.

MSI Afterburner properties	<						
General Monitoring On-Screen Display Screen capture Video capture	Þ						
Master graphics processor selection	•						
GPU1 : AMD Radeon R9 M295X (Bootcamp edition by bootcampdriver. V							
Synchronize settings for similar graphics processors							
General properties							
Start with Windows							
Start minimized							
Compatibility properties							
Enable hardware control and monitoring							
Enable low-level IO driver							
Enable low-level hardware access interface user mode ~							
Restore settings after suspended mode							
Unlock voltage control reference design ~							
Unlock voltage monitoring							
✓ Force constant voltage							
Update checking properties							
Check for available product updates $$ on startup weekly $$ \sim							
Check for available product beta versions							
Last checked on Wednesday, March 15, 2017, 14:15:59 Check now							
AMD compatibility properties							
Extend official overclocking limits							
Disable ULPS							
Unofficial overclocking mode with PowerPlay support ~							
Reset display mode on applying unofficial overclocking							
Enable unified GPU usage monitoring							
Erase autosaved startup settings							
OK Cancel Help							

- After clicking 'OK' you will be required to restart your computer for changes to take effect.
- Open MSI Afterburner again after rebooting. You can now alter the core clock and memory clock speeds on your graphics card. Recommended safe overclocking for M295X is 860 MHZ on core clock and 1400 MHZ on memory clock. This will vary for different graphics cards however. See the forum for more user guides.

AMD OVERDRIVE INSTRUCTIONS

- First of all, MSI Afterburner will need to be downloaded so that the setting to enable AMD Overdrive can be applied. Run the setup for MSI Afterburner then restart your computer.
- Open MSI Afterburner, then click on the settings button (this can vary where it is located based on which version or skin you are using).
- In the MSI Afterburner properties window that appears, there is one checkbox called 'Extend official overclocking limits' that needs to be ticked (see below). This will enable AMD Overdrive in the Radeon Crimson software, which can be found under the 'Gaming' tab and 'Global Settings' (see bottom image). Ignore all other checkboxes/settings in MSI Afterburner. You may also need to set 'Unofficial overclocking mode' to 'with Powerplay support' with some driver versions.

Extend official overclocking lim	iits	
✓ Disable ULPS		
Unofficial overclocking mode	disabled	~
Reset display mode on applyin	g unofficial overclocking	
Enable unified GPU usage mor	nitoring	

AMDA RADEON SET	T I N G S				_ 🗆 ×
< 🌐 Global Settings					
Globa	l Graphics			Global OverDrive	
View and configure fan and clock spe	eds				more
0% 318MHz Activity GPU	1362MHz Memory Ta	68℃ emperature _{0%}		30.00% 전 고 연 Power Limit	GPU Clock: 0.00% Power Limit: 0%
				-30.00%	
GPU Clock 0%	-30%				+30%
Memory Clock 1362MHz	143MHz			•	1770MHz
A Caming	► Video	ReLive	Display	ŢŢ	i System

- After clicking 'OK' you will be required to restart your computer for changes to take effect.
- You can now remove MSI Afterburner from your computer if you wish.

Note: You may need to re-tick the 'Extend official overclock limits' box to enable overclocking again after installing a graphics driver update.