

OpenCore and MSI Rx 5500XT

Beitrag von „asheenlevrai“ vom 14. September 2020, 11:08

Hi

I recently built my 1st ryzentosh.

my rig:

AMD Ryzen 5 3600XT (CPU)

Asus TUF gaming X570 Plus (MB)

2x 16GB G.skill TridentZ 3600MHz (DDR4 RAM)

MSI Radeon rx5500XT mech 4g oc (GPU with 4GB gDDR6)

Seagate Firecuda 1TB M.2 NVME SSD

I also used Opencore (0.6.1) for the 1st time and followed the install guides on Dortania to install Catalina (10.15.6).

Now I couldn't install with my MSI Rx 5500XT. Apparently this is a [known bug for MSI 5000 series cards](#) that is mentioned in the install guide (Dortania) so I swapped an Rx590, removed pikera mod, and finished the install.

I hoped the MSI 5500XT would work after Catalina is installed as mentioned [here](#). It didn't. I was disappointed since 2 posts (including [this one](#)) in this thread mentioned that it should work once macOS loads from the SSD rather than the USB installer.

I tried applying the [patch mention here](#) in the guide as well. It didn't fix my problem. I was wondering if maybe this patch is specific for MSI 5700XT cards and wouldn't work for 5500XT cards (values in the patch would need to be different).

I guess I should follow the advice mentioned [here](#) (injecting `ATY,Rom#`). But I am not sure how to do it. I don't have a dual boot with windows on this machine to perform [this](#).

And although [this post](#) mentions Opencore Configurator, the guide on Dortania specifies to stay away from any kind of automatic configurators...

I guess I should try gfxutil in recovery, as indicated [here](#) but I'm not sure how to use gfxutil in this case. I am not familiar with it.

I don't really know how to access gfxutil (located on the desktop) when I am in recovery (using bash). It seems different than the terminal in macOS.

Thus, I tried the following which didn't work. It was probably pushing my luck too far...

- While the Rx590 was into my rig:

a) install Opencore Configurator and added the GPU in DeviceProperties as described [here](#). (I was hoping the value for "PciRoot..." and "AAPL,slot-name" would be the same no matter what card is present.). Then saved my config.plist

b) Since then my config.plist file could no longer be opened using ProperTree because of an error in line 206 (value for "model" of the GPU in DeviceProperties). This remained no matter what I put here. Since then, I made subsequent modifications using TextEdit...

c) Added the patch for MSI 5000 series GPU in Kernel->Patch as described [here](#) and [here](#).

d) Added "agdpmod=pikera" in boot-args

e) Shut down the PC

Then I replaced the Rx590 with the Rx5500XT

I tried to boot but I get the following message before drive selection in OpenCore:

```
"OCS: Failed to parse data field as blob with type boolean and <4154592C526F6D2300>
contents, context <Replace>!"
```

```
"OCS: Failed to parse data field as blob with type boolean and <414D442C526F6D2300>
contents, context <Replace>!"
```

Then boot continues through drive selection and then crashes while the apple logo is displayed (no progress bar). This time it didn't end with a black screen, though 😊

I guess this means that either I made a typo somewhere or the data that need to be found and replaced by the patch are not the good ones (maybe these work with MSI 5700XT cards but not with MSI 5500XT cards).

Any help here would be greatly appreciated.

Tx

-a-

Beitrag von „Aluveitie“ vom 14. September 2020, 11:28

Judging from the OC error message I'd think you made an error when entering the patch into the config.plist. Check the type and data field are set correctly and/or upload the config.plist to have a look.

Beitrag von „asheenlevrai“ vom 15. September 2020, 10:48

[Zitat von Aluveitie](#)

Judging from the OC error message I'd think you made an error when entering the patch into the config.plist. Check the type and data field are set correctly and/or upload the config.plist to have a look.

OK, so I went back to my "original" config.plist (the one that works well with my Rx590) and started again to edit it in order to use the Rx5500XT.

This time I did everything I could in ProperTree (adding the boot-arg, adding the patch into Kernel->Patch) and then I used OpenCore Configurator to add the part in DeviceProperties (including the ATY,Rom# injection). Again, I did all that **while the Rx590 was in the PC** and The values OpenCore Configurator added for PciRoot..., AAPL,slot-name may be incorrect. Once again, for ATY,Rom# I just copied the value I found [here](#).

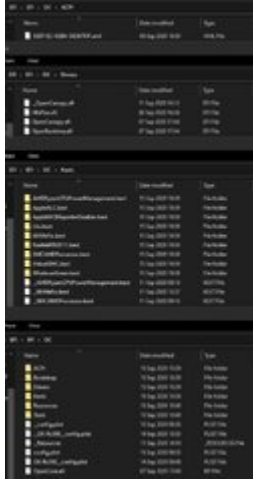
After Saving and exit OpenCore Configurator, I tried opening the file with ProperTree and This time I didn't get any error message from ProperTree and the file opened normally (this was a small win for me 😁)

I shut down the PC and replaced the Rx590 with the Rx5500XT, booted, and this time I didn't get any error message early. So I guess the patch found the data it was supposed to replace, maybe... I don't know... I reached the Apple logo and this time the progress bar went to about 75% before I ended up with a black screen (damn!)

However, I can reach macOS via VNC. The display is low res (as if the GPU wasn't recognized), but SystemReport seems to show my Rx 5500XT



Here are the plist file that works with my Rx590 and the "experimental" one for the Rx5500XT.



Thank you very much in advance for your help.

Best,

-a-

Beitrag von „Aluveitie“ vom 15. September 2020, 11:57

Then I don't know. I dismantled my rig recently to upgrade so I cannot check what value my old RX 5500 XT had...

It does not work without the ATY,Rom property injected? The bug is described within the installer, so it should run without any injected properties/ACPI renames as far as I understand the issue.

Beitrag von „apfelnico“ vom 15. September 2020, 12:30

Zitat von asheenlevrai

I did all that while (...) AAPL,slot-name may be incorrect.

"WhateverGreen.kext" should provide any correct values. Only the specification of the "PCI slot" _COULD_ look a bit strange due to the ACPI (not optimized for macOS).

If you want to change that, the entry "AAPL, slot-name" is sufficient. For this I would use the value "Slot-1" instead of "Internal ...", because the graphics card is in a PCIe slot and is not integrated on the mainboard.

Beitrag von „asheenlevrai“ vom 15. September 2020, 14:30

Zitat von Aluveitie

Then I don't know. I dismantled my rig recently to upgrade so I cannot check what value my old RX 5500 XT had...

It does not work without the ATY,Rom property injected? The bug is described within the installer, so it should run without any injected properties/ACPI renames as far as I understand the issue.

Thanks 😊

I removed ATY,Rom# and indeed nothing changed.

Not better, not worse

In the beginning, I also thought that I shouldn't add anything in DeviceProperties (only the boot-arg and the kernel->patch, as described in the installer guide on Dortania). However this didn't work either. Maybe now I should revert and see how different it was compared to where I am now...

Zitat von apfelnico

"WhateverGreen.kext" should provide any correct values. Only the specification of the "PCI slot" _COULD_ look a bit strange due to the ACPI (not optimized for macOS).

If you want to change that, the entry "AAPL, slot-name" is sufficient. For this I would use the value "Slot-1" instead of "Internal ...", because the graphics card is in a PCIe

slot and is not integrated on the mainboard.

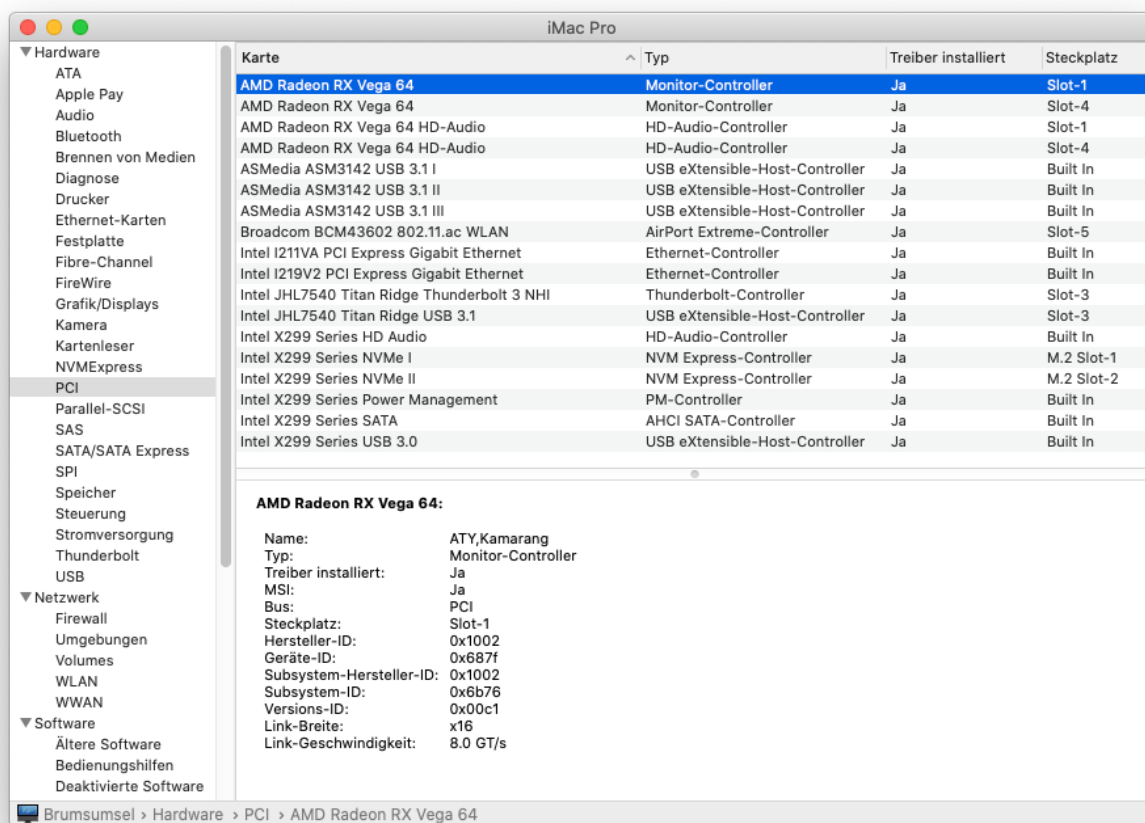
Thanks 😊

Should I replace "internal@0,3,1/0,0" with "slot-1" or rather "slot-1@(something)"?

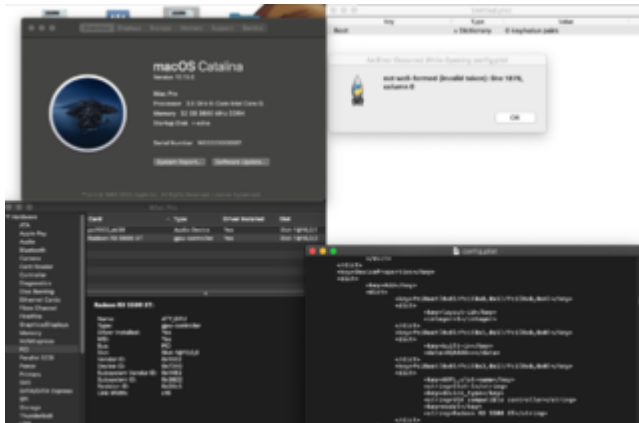
Beitrag von „apfelnico“ vom 15. September 2020, 14:38

[asheenlevrai](#)

It could look like this:



Beitrag von „asheenlevrai“ vom 15. September 2020, 14:56



I must have done something wrong 🤔

Now ProperTree won't open my config.plist

Beitrag von „Aluveitie“ vom 15. September 2020, 14:59

You can use simple TextEdit to open and then navigate to that line and check what is wrong.

Beitrag von „asheenlevrai“ vom 15. September 2020, 14:59

Zitat von Aluveitie

You can use simple TextEdit to open and then navigate to that line and check what is wrong.

How do I "navigate" to that line?

Beitrag von „Aluveitie“ vom 15. September 2020, 15:01

Command + L

Beitrag von „asheenlevrai“ vom 15. September 2020, 15:20

That was actually the last line of the file (1875 is: </plist>). This line is empty.

I tried to erase it but it doesn't work really.

It always comes back

Beitrag von „Aluveitie“ vom 15. September 2020, 15:21

Then there is somewhere in between a closing tag missing and it just fails parsing at the end of the file.

Beitrag von „asheenlevrai“ vom 15. September 2020, 16:09

OK... I couldn't find it. So...

I went back to my "original" config.plist (the one that works well with my Rx590) and started all over again to edit it in order to use the Rx5500XT.

Again I did everything I could in ProperTree (adding the boot-arg, adding the patch into Kernel->Patch) and then I used OpenCore Configurator to add the part in DeviceProperties. This time I did all that **while the Rx5500XT was in the PC** and the values OpenCore Configurator added for PciRoot..., AAPL,slot-name may be identical to what I previously got doing the same thing while using the Rx590. are:

- previously (Rx590): PciRoot(0x0)/Pci(0x3,0x1)/Pci(0x0,0x0)
- now (Rx5500XT): PciRoot(0x0)/Pci(0x3,0x1)/Pci(0x0,0x0)/**Pci(0x0,0x0)/Pci(0x0,0x0)**



After Saving and exit OpenCore Configurator, I tried opening the file with ProperTree and unfortunately (like the 1st time I did this whole thing) I get an error message from ProperTree and the file won't open. Error at line 206 which is in the DeviceProperties section where the name of the model of the GPU is indicated:

```
<string>Radeon RX 5500 XT</string>
```

Well... I ignored that (since nothing seems to make it go away) and rebooted.

I'm back at the same spot (black screen after progress bar at the Apple logo. I access the PC via VNC).

Any idea?

Just a quick question: The thing about AAPL,slot-name, is it only cosmetic (what will be displayed in System Report or does it affect how hardware works/is recognized?

Thanks a lot

-a-

Beitrag von „Aluveitie“ vom 15. September 2020, 16:25

Seems like OpenCore Configurator is corrupting the file. I've never used it, XCode oder ProperTree seem far saver options.

Beitrag von „apfelnico“ vom 15. September 2020, 16:31

[asheenlevrai](#)

Try this here:

Edit: Sorry, I've just re-uploaded. I made a mistake before.

Beitrag von „asheenlevrai“ vom 15. September 2020, 16:36

[Zitat von Aluveitie](#)

Seems like OpenCore Configurator is corrupting the file. I've never used it, XCode oder ProperTree seem far saver options.

I agree.

I used it because of [this post](#). As a last resort since I don't know how to obtain those values for PciRoot..., AAPL,slot-number etc.

but since these do not seem to be correct (at least for AAPL,slot-name), maybe I should get them otherwise and do the changes in ProperTree (again starting from my original config.plist.

On the [same thread](#), someone said to boot into recovery and use gfxutil to obtain the value for

PciRoot... I don't know how to do that, though. Maybe you know?

Beitrag von „apfelnico“ vom 15. September 2020, 16:49

[asheenlevrai](#)

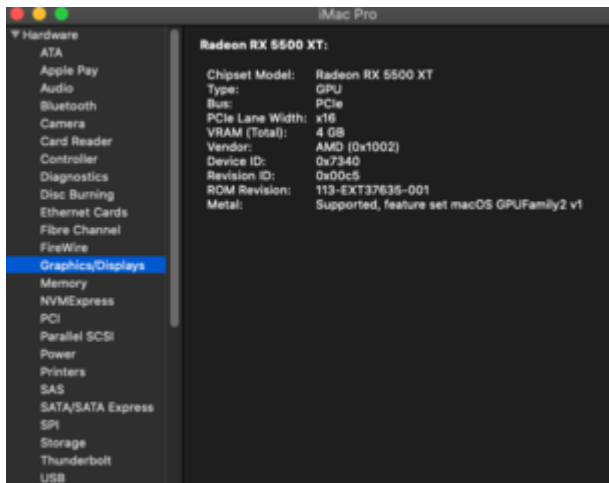
Use the Hackintool program. There you will find your graphics card under "PCIe". With the right mouse button you can copy the device path to the "Device path" column.

Beitrag von „asheenlevrai“ vom 15. September 2020, 16:59

[Zitat von asheenlevrai](#)

maybe I should get them otherwise and do the changes in ProperTree (again starting from my original config.plist).

I just did that... Basically the result is the same (black screen after progress bar on Apple logo. Connect to PC via VNC) however, in system Report, things are different. Worse? Better?

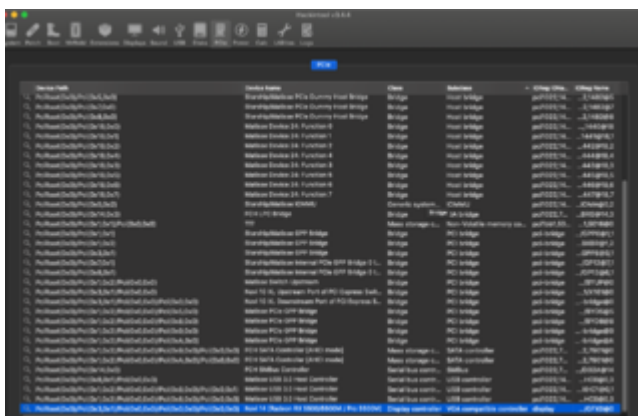




[apfelnico](#)

Thanks.

Same value for PciRoot...



Beitrag von „apfelnico“ vom 15. September 2020, 17:07

1. Please try what I added in # 16.

2. Maybe remove "agdpmod = pikera"

(NVRAM \ Add \ 7C436110-AB2A-4BBB-A880-FE41995C9F82 \ boot-args)

Beitrag von „asheenlevrai“ vom 16. September 2020, 09:39

Zitat von apfelnico

1. Please try what I added in # 16.

2. Maybe remove "agdpmod = pikera"

(NVRAM \ Add \ 7C436110-AB2A-4BBB-A880-FE41995C9F82 \ boot-args)

Thanks a lot!

I didn't see #16

I tried your config.plist but it didn't change the outcome. Still stuck at the same level 😞

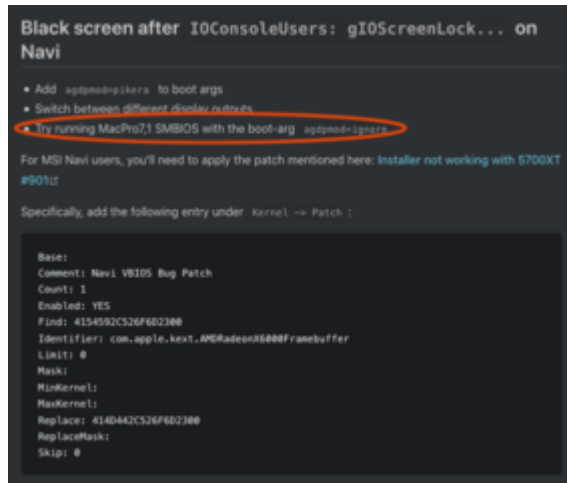
After removing agdpmod=pikera from boot-args

-> same thing. The only improvement is that now the PC can shutdown/reboot normally (I don't need to press the power/reset button anymore). I'm not sure I should consider this an improvement (since there might be other ways to fix that), but at least it's that.

Thanks again, though...

EDIT!:

I tried the following



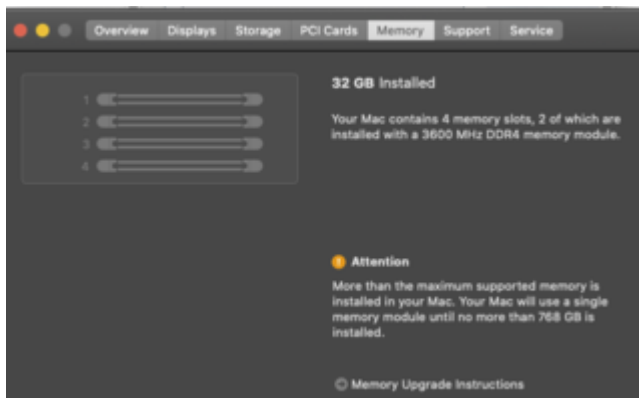
And now after reboot my display is working and the resolution is right :)))



However, the mac doesn't seem to be sure wheter it's an iMacPro or a MacPro !?!?!



And I get an error message saying there is now too much ram on my MacPro



Should I be concerned?

How good of a choice was it to move from iMacPro1,1 to MacPro7,1?

Beitrag von „Aluveitie“ vom 16. September 2020, 09:47

You'd need to re-generate the SystemSerialNumber, that one depends on the chosen SMBIOS. The SerialNumber you can leave the same.

MacOS has some expectations regarding RAM on MacPro7,1 that are not met and it warns the user that something is not as expected. But it does not affect anything.

For the warning you'd need a kext to suppress the notification:
<https://github.com/IOIIIIO/MacProMemoryNotificationDisabler>

Beitrag von „asheenlevrai“ vom 16. September 2020, 09:54

With this MacPro7,1 value that now allows the PC to boot relatively OK, I tried changing back from agdpmmod=ignore to agdpmmod=pikera and it doesn't seem to change anything

[Aluveitie](#)


"You'd need to re-generate the SystemSerialNumber, that one depends on the chosen SMBIOS. The SerialNumber you can leave the same."

I'd need to learn how to do that (Apfelnico helped me out here ).

[Aluveitie](#)

"MacOS has some expectations regarding RAM on MacPro7,1 that are not met and it warns the user that something is not as expected. But it does not affect anything."

For the warning you'd need a kext to suppress the notification:
<https://github.com/IOIIIIO/MacProMemoryNotificationDisabler>

Thank you very much for the link to this kext 

Beitrag von „Aluveitie“ vom 16. September 2020, 10:05

You can read about the PlatformInfo here:
<https://dortania.github.io/OpenCore-AMD/zen.html#platforminfo>

OpenCore Configurator would have a section to generate that too. You can generate it there and then copy/paste it manually into the config.plist

Beitrag von „asheenlevrai“ vom 17. September 2020, 10:47

I feel like I wanna hurt myself now 🤪🤪 (I won't)

Actually It wasn't about SMBIOS setting or whatever.

When I switched from iMacPro1,1 to MacPro7,1 I also switched what DP I used on my graphics card.

My MSI Rx500XT has 4 ports: 1 HDMI and 3 DP.

Except for 1 DP (the one furthest from the HDMI port) all other ports don't cause black screens.

I was literally using the only DP that is problematic!!!

So now I have no idea what settings were or were not important.

EDIT: I removed the kernel patch for NAVI as it is no longer required (after install) as mentioned in the original bug report on github.

Thank you very much again for all the help and the time you provided.

Best,

-a-

PS: Maybe I should do something, change a setting, to have this last DP working normally. If this would bring more stability to my Ryzentosh I'd do it. But I don't necessarily **need** that 3rd DP

Maybe it's impossible to make it work. In this case, I'm fine...

PPS: should I remove agdpmmod from boot-args?