

# **ASUS Rampage VI Extreme (original) with Radeon VII**

**Beitrag von „Warbands“ vom 22. Oktober 2020, 03:07**

ASUS Rampage VI Extreme (original) with Radeon VII

I am currently using OpenCore 6.2 and have a "decently" working EFI setup for my Rampage VI Extreme (original), but there are things that still don't work.

Things that don't work

- Sleep, I couldn't get the machine to sleep, the screen will go dark, but the computer won't go to sleep
- USBMap has been a bit of a pain to say the least

I am including my config.plist, with a side note. I have a DSDT.aml that was created for me that seems to cover a ton of stuff, the other SSDT's that I was using seemed to do a good job, I think the big DSDT.aml is a bit more detailed.

If anyone has any pointers or suggestions based on my config.plist let me know. If someone has an amazing fully working EFI they want to share, I would be happy to check it out.

It is rare to find X299 Hackintosh setups using the ASUS Rampage VI Extreme, so I am glad I found this forum.

My apologies that my post is in English, I read through the forum rules and didn't see any rules against posting in English. I have pasted a google translation below:

German version

ASUS Rampage VI Extreme (Original) mit Radeon VII

Ich verwende derzeit OpenCore 6.2 und habe ein "anständig" funktionierendes EFI-Setup für mein Rampage VI Extreme (Original), aber es gibt Dinge, die immer noch nicht funktionieren.

Dinge, die nicht funktionieren

- Schlaf, ich konnte die Maschine nicht in den Ruhezustand versetzen, der Bildschirm wird dunkel, aber der Computer wird nicht in den Ruhezustand versetzt
- USBMap war, gelinde gesagt, ein bisschen schmerhaft

Ich füge meine config.plist mit einer Randnotiz hinzu. Ich habe eine DSDT.aml, die für mich erstellt wurde und eine Menge Dinge abzudecken scheint. Die anderen SSDTs, die ich verwendet habe, schienen gute Arbeit zu leisten. Ich denke, die große DSDT.aml ist etwas detaillierter.

Wenn jemand Hinweise oder Vorschläge hat, die auf meiner config.plist basieren, lass es mich wissen. Wenn jemand einen erstaunlichen voll funktionsfähigen EFI hat, den er teilen möchte, würde ich ihn gerne ausprobieren.

Es ist selten, dass X299-Hackintosh-Setups mit ASUS Rampage VI Extreme gefunden werden. Daher bin ich froh, dass ich dieses Forum gefunden habe.

Ich entschuldige mich dafür, dass mein Beitrag auf Englisch ist. Ich habe die Forenregeln durchgelesen und keine Regeln gegen das Posten auf Englisch gesehen.

---

### **Beitrag von „g-force“ vom 22. Oktober 2020, 05:45**



Welcome to the forum!

Writing in english is okay for most of our users, the translation is okay, too.

There's a user DSM2 here in the forum who is a specialist for X299-Boards. Maybe he'll take a look at your config.

---

### **Beitrag von „juantrix“ vom 22. Oktober 2020, 08:50**

wellcome @[Warbands](#)

I'm using your same motherboard & GPU. I will update my config to 062 and compare.

---

### **Beitrag von „DSM2“ vom 22. Oktober 2020, 10:44**

I didn't check your config.plist but I don't need too to answer your questions.

Sleep will work without issues as soon as all usb ports will be mapped.

You have to set up some of the ports as USB 2 ports since the motherboard have more then 15 USB ports available in total.

EFI wise it would be better if you could upload your whole EFI Folder and not only your config.plist

---

### **Beitrag von „Warbands“ vom 22. Oktober 2020, 22:51**

Thank you for the warm welcome! DSM2 I was about to handle my USB port mapping. I have seen 2 main methods for this.

Method # 1 InjectAll and Hackintool

<https://www.youtube.com/watch?...channel=OlarilaHackintosh>

Method # 2 Using USBMap

After watching the video for Method # 1, it seemed straight forward. I found USBMap in the past to be a bit hit and miss. Which method do most people use?

I have included my EFI, though this is ahead of me finishing the USB port mapping.

[juantrix](#), what is not currently working for you for your setup?

Edit, I ended up using USBMap as Method #1 ended up acting odd.

Damn there are a lot of USB ports on this board 😊

I was able to bring my ports down to 15 according to USBMap

---

### **Beitrag von „DSM2“ vom 23. Oktober 2020, 04:36**

If you use OpenCore as your Bootloader there is no need in any port limit patches.

You just have to enable the XhciPortLimit Quirk.

Most of the people use the Hackintool method for the creation process of a custom USB Kext.

---

### **Beitrag von „Warbands“ vom 24. Oktober 2020, 01:47**

For me, using just the XhciPortLimit Quirk wasn't enough, I still had some USB oddities. I ended up using USBMap and I was able to reduce my port count and not have my Bluetooth disappear. On this motherboard, HS11 seems to be tied to my Bluetooth.

Even though I have my ports down to 15 (checked via USBMap and Hackintool) trying to put my computer to sleep only puts the screen to sleep, my fans and motherboard lights are still all going.

I ordered the ASUS ThunderEX 3 Thunderbolt add in card, I saw a thread here on the forums about someone who got it work (unsure if they got hot swapping to work) so hopefully that will be not too hard.

Edit\* I installed the ASUS ThunderEX 3 card, and set up my [bios settings](#) based on KGP's older x299 page ( his .aml locked up my machine so need to figure that one out ). I booted into Windows 10 and got it "working", I am getting a Thunderbolt 3 Samsung X5 tomorrow to test with, but my Type C key worked just fine in the Thunderbolt port. I booted into Mojave and again the Type C worked without issue, and supported plug and play. I am unsure what this will mean with the Thunderbolt 3 drive tomorrow. If there is anything else I need to know about getting the ThunderboltEX 3 card working under OS X, I would love to hear it.

Do you know if it is possible to capture or store the boot info that goes by. I know I can record errors to a log via opencore, and am doing that currently, I just would like to see everything, and recording it on a phone as it scrolls by is not great.

I also wanted to see if I could install Catalina on a second SSD, and start going down that path ( I am currently on Mojave ). When I use my current EFI and boot into the Catalina installer and go to install Catalina to my second SSD ( or any drive at all ) the install window disappears, checking the log I get the log that I have included below.

---

### **Beitrag von „Warbands“ vom 25. Oktober 2020, 02:03**

So I did a completely fresh EFI, and hand constructed all my own SSDT's. I also added initial setup for my ASUS ThunderboltEX 3 card. I followed KGP's info on his big post for x299 and Mojave.

I also learned something today, the 15 port USB limit is per USB controller, not for the entire system, according to CorpNewt. That was awesome to find out, meaning I only had to remove one USB port ( my ASUS RGB haha which was already useless ).

Edit\* I was able to get my ThunderboltEX 3 fully working! I followed KGP's guide to the letter, and took his SSDT-X299-TB3HP.aml and modified it to point to my 4th PCI slot. I was able to get my Thunderbolt drive working, but only if it was connected on boot. I read his post over and over again. Then it dawned on me, I remember seeing his post in 2 places, insanelymac and (illegal word on this forum). I was using the one at an insanelymac, so I went over to the (illegal word on this forum). It turns out he had completely different [BIOS settings](#) for Thunderbolt in that one. It was also dated 2 weeks later. So I updated my [BIOS settings](#), and

now it is working with full hot swap support!

Still having issues with trying to boot up Catalina sadly.

---

### **Beitrag von „juantrix“ vom 26. Oktober 2020, 16:21**

CLOVER EFI & BIOS & SETTINGS

---

### **Beitrag von „g-force“ vom 26. Oktober 2020, 17:22**

juantrix Please don't use external filehosters. Share your files within the forum by using "Dateianhänge" und "Hochladen" (Attachments & Upload).

---

### **Beitrag von „Warbands“ vom 28. Oktober 2020, 23:14**

juantrix Sorry I haven't responded till now. I had to evacuate due to the Silverado Fire in Orange County California. Just got back, so taking a look at your data. I was surprised to see you are using a way newer bios for the R6E, did it improve anything for you? I am also guessing why you have a Cascade Lake Fix aml possibly? This will take a bit of time to dig through, and I may have some more questions. Thank you for sending me this, very appreciated.

---

### **Beitrag von „DSM2“ vom 29. Oktober 2020, 00:25**

Awac Fix ivia ssdt is not the only way to fix this situation with the newer Bios versions.

It was the initial one but there is already a better one out there.

---

**Beitrag von „juantrix“ vom 29. Oktober 2020, 22:31**

OC 061 R6E 7960x VII's TH MP7,1 10.15.7 & Big Sur 11.0.1

Warbands

---

**Beitrag von „DSM2“ vom 29. Oktober 2020, 22:50**

juantrix you can not link a private message... No one besides from you can access it.

---

**Beitrag von „Warbands“ vom 4. November 2020, 18:10**

juantrix Thanks, I will check out the zip!

---

**Beitrag von „Ghostmac1969“ vom 19. November 2020, 17:14**

juantrix

Hi,

I write in english as my german is rusty ...

I succeeded to install BS (20B29). All work fine but sometimes I have a reboot reported as a problem with GFX0 kext (com.apple.driver.AppleGFXHDA(100.1.431)). That happened with Catalina too and a Google search allowed me to discover that this seems to be an issue related to Radeon VII audio (see on this forum too: [here](#) and [here](#)).

I saw your EFI posted above and I noticed that in your ACPI folder there are specific SSDTs, including two for Radeon VII.

At this time, my build is so composed:

1. ASUS SAGE/10G
2. 128 GB RAM (16x8)
3. Radeon VII (slot 1)
4. Titan Ridge TTB3 (slot 2)
5. HighPoint RocketRAID 2840A (slot 3)
6. MQUPIN FENVI T919 Scheda Wireless BCM94360CD (slot 4)
7. HighPoint SSD7101A-1 NVMe RAID controller

Do you think I could use "SSDT-X299-Radeon7-Slot-1" in my build?

Thank you in advance

---

**Beitrag von „timmptom“ vom 19. November 2020, 17:35**

Hi [Ghostmac1969](#) , as you posted, I also had kernel panics / problems with AppleGFXHDA - if the SSDT is not going to help, you could try using the tool in Kext Updater's (dl: <https://www.soft.de/kext-updater/>) tool ("Werkzeuge" in German) section to block AppleGFXHDA:



I did not have kernel panics in the last month using it ...

all the best,

timmomm

---

### **Beitrag von „Ghostmac1969“ vom 19. November 2020, 17:48**

timmomm

Thank you for your answer. I'd considered to do so, but I was searching a permanent solution, as it seems that R VII works fine on some builds ...

I save this solution as "plan B"

---

### **Beitrag von „juantrix“ vom 19. November 2020, 18:46**

@[Ghostmac1969](#),

I'm moving to a Sage/10G Mobo. Try my OC modified for it.  
(OC063 Sage10G 7960x 2xVII TH wifi 3203Bios)

I'm working in a correct implement of USB yet.

---

**Beitrag von „Ghostmac1969“ vom 19. November 2020, 19:29**

[juantrix](#)

Thank you so much!!!

---

**Beitrag von „juantrix“ vom 19. November 2020, 20:20**

I forgot to enable SmallTreeIntel8259x.kext in config for Intel X550T2.  
My Radeon VII's is DownPower with Custompowerplay to 981mV & HBM 1100MHz in aml.

---

**Beitrag von „Ghostmac1969“ vom 19. November 2020, 20:38**

[juantrix](#) I noticed that you've set the SMBIOS as iMacPro1,1, whereas in the previous version of your EFI that was MacPro7,1. I'm running with the latter...

Edit: [juantrix](#) do you had some progress in your EFI?

---

## **Beitrag von „Ghostmac1969“ vom 21. November 2020, 17:25**

[juantrix](#)

Congrats. With your Radeon VII SSDT my hack is now quite stable. I can say that as I'm running a duplicate finder since 5 hours on my principal repo (more than 2 TB data) w/o reboot and/or kernel panic. The only problem to solve is now the audio on DP. The related controls are missing along with the audio itself ...

---

## **Beitrag von „Warbands“ vom 21. Dezember 2020, 05:16**

[juantrix](#) I am also curious regarding your use of MacPro 7,1 vs iMacPro1,1 was there any reason you moved towards using MacPro 7,1?

Also I noticed you have a thunderbolt aml, do you have any issues with hot plug working?

---

## **Beitrag von „juantrix“ vom 21. Dezember 2020, 15:21**

For me, there is no differences in smbios used. But remember, for x299 is recommended iMacPro.

I have a TitanRidge AIC with v33 firmware flashed & personalized aml. No issues at the moment.

---

## **Beitrag von „Warbands“ vom 21. Dezember 2020, 20:56**

TitanRidge AIC? Not familiar with that one. Is it the same board as the ASUS ThunderboltEX 3? If you have nothing plugged into your Thunderbolt card, does it say "No drivers are loaded." in the System Information panel?

As far as smbios, I am currently using iMacPro1,1, I was just curious why you were using

MacPro7,1.

I also have seen an issue where my 10Gbit ethernet ( Aquantia AQC107 ) on the ASUS Rampage VI Extreme seems to be recognized as you can see in the screenshot, but for some reason says that the ethernet cable is not plugged in. I don't have a solution so far, any ideas? I am using the following in my config.plist

XML

```
1. <?xml version="1.0" encoding="UTF-8"?>
2. <!DOCTYPE      plist      PUBLIC      "-//Apple//DTD      PLIST      1.0//EN"
   "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
3. <plist version="1.0">
4. <array>
5. <dict>
6. <key>Arch</key>
7. <string>x86_64</string>
8. <key>Base</key>
9. <string></string>
10. <key>Comment</key>
11. <string>Aquantia 10Gb Ethernet Patch</string>
12. <key>Count</key>
13. <integer>1</integer>
14. <key>Enabled</key>
15. <true/>
16. <key>Find</key>
17. <data>
18. YnVpbHQtaW4=
19. </data>
20. <key>Identifier</key>
21. <string>com.apple.driver.AppleEthernetAquantiaAqton</string>
22. <key>Limit</key>
23. <integer>0</integer>
24. <key>Mask</key>
25. <data>
26. </data>
27. <key>MaxKernel</key>
28. <string></string>
29. <key>MinKernel</key>
30. <string></string>
```

```
31. <key>Replace</key>
32. <data>
33. YmJiYmJiYml=
34. </data>
35. <key>ReplaceMask</key>
36. <data>
37. </data>
38. <key>Skip</key>
39. <integer>0</integer>
40. </dict>
41. </array>
42. </plist>
```

Alles anzeigen

I saw you had a specific SSDT-X299-AQC107.aml file, though I wasn't sure why. I also noticed you had a different patch. I tried your patch, and the AQC107 stopped showing up entirely.

---

### **Beitrag von „juantrix“ vom 22. Dezember 2020, 16:44**

#### **Thunderbolt**

I have a gigabyte GC-Titan Ridge Card.... there are a lots of information in this forum thanks to DSM2 about **flash it with a programmer**, jumpers pins to force power... needed to appear in system info - hardware - Thunderbolt.

If you have a no flashed card (modified firmware), you can obtain hotplug only with a correct aml for your card.

Asus ThunderboltEX (Alpine ridge) (need to be configured in bios and connect to mobo).

more info:

#### **ASUS-THUNDERBOLT-EX-3**

REMOVED by DSM2 - Tonystuff links are not welcome here...

## Thunderbolt SSDT with Custom DROM

### Personalized SSDT

#### **AQC107**

If you have problems with AQC107... Remember to update the firmware...

A long time ago, used Aquantia Diag Tool Software to update the initial 1.50 firmware from windows.

### AQC firmware

I used SSDT-X299-AQC107.aml in Clover...

In Opencore, properties can be added directly in config.plist

Code

```
1. <key>DeviceProperties</key>
2. <dict>
3. <key>Add</key>
4. <dict>
5. <key>PciRoot(0x0)/Pci(0x1C,0x4)/Pci(0x0,0x0)</key>
6. <dict>
7. <key>AAPL,slot-name</key>
8. <string>Built In</string>
9. <key>device_type</key>
10. <string>Ethernet controller</string>
11. <key>model</key>
12. <string>AQC107</string>
13. </dict>
```

Alles anzeigen

Patch it necesary.(kernel - Patch)

Code

```
1. <dict>
2. <key>Arch</key>
```

```
3. <string>Any</string>
4. <key>Base</key>
5. <string></string>
6. <key>Comment</key>
7. <string>Aquantia 10Gbe Patch</string>
8. <key>Count</key>
9. <integer>0</integer>
10. <key>Enabled</key>
11. <true/>
12. <key>Find</key>
13. <data>D4TAAgAA</data>
14. <key>Identifier</key>
15. <string>com.apple.driver.AppleEthernetAquantiaAqton</string>
16. <key>Limit</key>
17. <integer>0</integer>
18. <key>Mask</key>
19. <data></data>
20. <key>MaxKernel</key>
21. <string></string>
22. <key>MinKernel</key>
23. <string></string>
24. <key>Replace</key>
25. <data>Zg8fRAAA</data>
26. <key>ReplaceMask</key>
27. <data></data>
28. <key>Skip</key>
29. <integer>0</integer>
30. </dict>
```

Alles anzeigen

---

## Beitrag von „Warbands“ vom 24. Dezember 2020, 00:27

Thanks for the information [juantrix](#) , I will check out what that Thunderbolt config page gives me compared to my current .aml file.

My Aquantia AQC107 is flashed to the latest firmware and that didn't help. I am going to check your latest patch, as it differs from the patch find and replace that I have seen talked about everywhere. I will let you know how this goes, thanks!

[juantrix](#) I am curious, why did you move from the Rampage VI Extreme to the Sage-10G?

---

### **Beitrag von „Toskache“ vom 24. Dezember 2020, 11:59**

You nee a patch for the Aquantia:

- \* com.apple.driver.AppleEthernetAquantiaAqtion
  - \* Find: 0F84C002 0000
  - \* Replace: 660F1F44 0000
- 

### **Beitrag von „Warbands“ vom 4. Januar 2021, 18:52**

#### Zitat von Toskache

You nee a patch for the Aquantia:

- \* com.apple.driver.AppleEthernetAquantiaAqtion
- \* Find: 0F84C002 0000
- \* Replace: 660F1F44 0000

When I use that patch, the 10Gb Ethernet disappears completely from the system information page. If I use the following patch it at least shows up, though it acts like I never have a cable plugged into it:

- \* com.apple.driver.AppleEthernetAquantiaAqtion
- \* Find: 6275696C 742D696E

\* Replace: 62626262 62626262

Under Windows 10 the Aquantia 10g Ethernet built into my ASUS Rampage VI Extreme works great with no issues.

I am noticing the following during bootup:

AssetMacros: status,  
file:/AppleInternal/BuildRoot/Library/Caches/com.apple.xbs/Sources/AppleEthernetAquantiaAqton/AppleEther  
89/AppleEthernetAquantiaAqton/lf\_axge.cpp, line: 5853, value: 0

---

### **Beitrag von „juantrix“ vom 6. Januar 2021, 09:39**

Code

1. \* com.apple.driver.AppleEthernetAquantiaAqton
2. \* Find: 0F84C002 0000
3. \* Replace: 660F1F44 0000

Some users appears with the same problem (disconnected).

Did you play with windows? (check it work with drivers installed, then shutdown, power Off completely). Try boot OSx.

---

### **Beitrag von „Warbands“ vom 6. Januar 2021, 14:34**

Yea I verified that the 10Gb Ethernet worked and received an IP under Windows 10. I am also running the current firmware for the built-in NIC. I then shutdown completely and powered down, and then booted up macOS Catalina. With my previous patch

- \* com.apple.driver.AppleEthernetAquantiaAqtion
- \* Find: 6275696C 742D696E
- \* Replace: 62626262 62626262

I would at least get the Aquantia to show up under system information, but it never picks up an IP and acts like the cable is not plugged in. Any other patch, like the one mentioned by [Toskache](#) wouldn't end up even showing my 10Gb NIC under System Information.

I have been digging through other forums, insanelymac for instance, trying to find other users who have experienced a similar issue, but so far nothing has worked.

There were some threads where people were having to use an older macOS build to flash the firmware on the NIC ( unsure but I think those were standalone cards ).

I know people have gotten the 10Gb ethernet to work on the ASUS Rampage VI Extreme, I am just at a loss on how.