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🏠 Home ▸ Builds ▸ ASUS ROG STRIX Z370-G Hackintosh Guide mATX Build

ASUS ROG STRIX Z370-G HACKINTOSH GUIDE MATX BUILD

Builds   ⏱ August 2, 2018

Here's an ASUS Z370-G Hackintosh running both macOS Mojave and High Sierra paired with an i5-8600k running off UHD 630 Integrated Graphics. I thought I'd post my latest build because of all the people I've come across who have had trouble turning their new ASUS ROG Strix motherboards like the Z370-E or Z370-F into a working hackintosh.

I thought I might as well post what I did to get mine working because even I had a big issue with the RAM preventing my hackintosh from booting up when I first got it, which was solved by mapping the RAM properly. This wasn't the only ASUS motherboard I've had RAM troubles with. Although my previous ASUS Maximus Hero X motherboard didn't require the RAM to mapped like this Z370-G build it did have post errors on Boot if the CPU cooler was nice and tight which seems to be an issue with ASUS motherboard in general. So anyways with Mojave just around the corner here's one more build with both High Sierra 10.13.6 and Mojave 10.14 Beta both installed and running.

ASUS Z370-G Hackintosh Build Parts

Part	Name	Purchase
CPU	Intel Core i5-8600K Hex-Core Processor	238.99
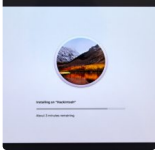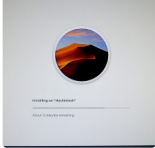
CPU Cooler	be quiet! DARK ROCK H7 Tower Cooler	80.93
Motherboard	ASUS ROG STRIX Z370-G mATX WI-FI	179.99
Memory	G.SKILL Ripjaws V Series 16GB 3200MHz	172.99
Storage	SAMSUNG 860 EVO Series 250GB SSD	79.99
Case	MasterBox Q300L mATX Case	39.99
Power Supply	CORSAIR TX-M Series TX550M 550W	59.99
	Total	806.93

## Desk Peripherals

Peripheral	Name
Monitor	ASUS VG245H Gaming Monitor
Keyboard	NightFox Mechanical Keyboard
Mouse	Logitech M705 Wireless Mouse
Headphones	Sennheiser HD 598 Open Back

This build was built on a budget with only a I went with a single 16GB stick of memory just in case I ever decide to upgrade to 32GB. I also decided not to put a graphics card in this build for now even tough it does work with both Nvidia and AMD cards I tested simply because of my use case and how well Coffee Lake UHD 630 integrated graphics runs in High Sierra and Mojave there was no need to get a graphics card. I tried saving on the cooler, storage, power supply and case to bring the price down, the only thing I really needed was a strong CPU and at least 16GB of RAM since macOS will eat up every GB it can get.

ASUS ROG Strix Z370-G mATX WiFi

This motherboard comes with minimal RGB lighting that actually turns off in sleep unlike Gigabyte motherboards that are hackintoshed which is why I left it enabled. WiFi and Bluetooth will work in macOS if you replace the included WLAN card with a Broadcom BCM94352Z
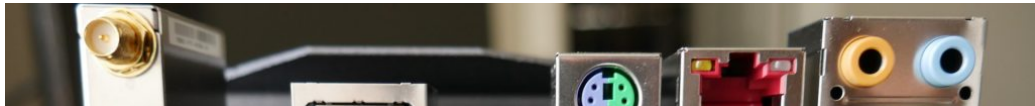
No USB-C port, but there is 8 USB-A ports which is like the most you can get on any mATX which to me makes this the best one. Also with macOS their isn't a way to disable wake from sleep with the mouse or keyboard, so if you accidentally tap your keyboard or have a super sensitive mouse there isn't anything you can do unless you have one of these red USB ports on the back like the ASUS Z370-G because the ports power off in sleep allowing me to keep my wireless mouse turned and not have to worry about it causing the Hackintosh to wake if I bump it.

MasterBox Q300L mATX Case

I had a budget in mind for this build so there was point splurging on the case I didn't need, so I went with the cheapest and most attractive case I could find for 40.00 since there aren't that many mATX cases to choose from and at only 14 inches tall it's one of the smaller mATX cases on the market.

ASUS Z370-G Hackintosh Guide

I installed Mojave on one partition of my Samsung 960 Evo and High Sierra on another. Since I constructed the Mojave guide and the 10.13.6 update of the High Sierra guide on this motherboard, simply following either general guide will get your Hackintosh running along with using the recommend BIOS settings below and then coming back here to some small post install changes once the Hackintosh is running is more than enough to turn a ROG Strix motherboard into a stable Hackintosh.

ASUS Hackintosh BIOS Settings

1. Exit → Load Optimized Defaults : **Yes**
2. Advanced \ CPU Configuration → Intel Virtualizaiton Technology: **Enabled**
3. Advanced \ System Agent (SA) Configuration → Vt-d: **Disabled**
4. Advanced \ PCH Configuration → IOAPIC 24-119 Entries: **Enabled**
5. Advanced \ Onboard Devices Configuration → RGB LED Lighting → When system is in sleep, hibernate or soft off states: **OFF**
6. Advanced \ AMP Configuration → Power On By PCI-E/PCI: **Enabled**
7. Advanced \ Network Stack Configuration → Network Stack: **Disabled**
8. Advanced \ USB Configuration -> Legacy USB Support: **Auto**
9. Boot → Fast Boot : **Disabled**
10. Boot → Secure Boot → OS Type : **Other OS**

Using a dedicated graphics card:

1. Advanced \ System Agent (SA) Configuration \ Graphics Configuration → Primary Display: **PEG**

Using Intel iGPU:

1. Advanced \ System Agent (SA) Configuration \ Graphics Configuration → Primary Display: **IGFX**

(Optional) Hardware Acceleration

iGPU Multi-Monitor: **Enabled** will cause Primary Display to be set to **IGFX**. If you are using a dedicated graphics card change it back to **PEG**

- Advanced \ System Agent (SA) Configuration\Graphics Configuration → iGPU Multi-Monitor: **Enabled**

For DVMT Pre-Allocated to show in BIOS you may need to save & reenter BIOS after setting iGPU Multi-Monitor: **Enabled**

- Advanced \ System Agent (SA) Configuration\Graphics Configuration → DVMT Pre-Allocated: **128MB/192MB**

ASUS Hackintosh RAM Fix

Guide: **Mapping RAM and DIMM Slots on a Hackintosh with Clover SMBIOS**

The only thing that can prevent an ASUS Hackintosh from booting the installer is if the RAM isn't mapped like in my case. I'm not sure which ASUS motherboards are affected besides mine, but what's really important after copying the EFI Folder over to your flash drive's boot partition is to layout the RAM properly in config.plist otherwise when you boot the installer nothing will happen other than showing the Apple Logo briefly and then restarting over again. The step you would do this in either guide is at Step 3 of the Mojave Guide or Step 3 of the High Sierra Guide.

Hackintosh General Guides

> ❝ *Guide to fresh installing macOS Mojave on a Hackintosh (10.14 Beta)*

Guide to fresh installing macOS High Sierra on a Hackintosh (10.13 Update)

High Sierra is out. Now it's time to install it on anything but a Mac. The first rig I got to run High Sierra is this cute and tiny silver build with an ASUS motherboard. High Sierra adds some pretty useful features like a log out button. The only downside I've noticed so far is that the screen waking can be a little slower then on Sierra. If you never built a hackintosh check out our list of compatible parts or the build list for hackintosh friendly parts. This High Sierra guide is compatible with the latest hardware from Coffee … Continue reading

🐙 Hackintosher   343

Mojave: **GUIDE TO FRESH INSTALLING MACOS Mojave ON A HACKINTOSH**

High Sierra: **GUIDE TO FRESH INSTALLING MACOS HIGH SIERRA ON A HACKINTOSH**

ASUS Z370-G Hackintosh Post-install Notes

- Ethernet should be working if you have a hackintosh compatible Broadcom WLAN card follow:
  Enabling Third Party Broadcom WLAN 802.11a/b/g/n WIFI + Bluetooth Cards on a Hackintosh
- If you followed this guide using a different motherboard and audio isn't working then you likely
  have a different audio chipset and need to change your layout-id to get audio working.
- If using a dedicated Nvidia or AMD graphics card change ig-platform-id to **0x59120003** and use
  iMac 18,2/iMac 18,3 SMBIOS definition in config.plist using Clover Configurator.
- With ASUS motherboards if the Hackintosh is getting ready to go to sleep and you interrupt it by
  shaking your mouse or pressing a keyboard key audio will be broken when the screen wakes. To fix
  this issue without restarting put the ASUS Hackintosh to sleep again and don't interrupt it, then
  once asleep wake it up again and audio will be working.

Leave a Reply

34 Comments on "ASUS ROG STRIX Z370-G Hackintosh Guide mATX Build"

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Chatchai

Can we enable VT-d and VT-x for using Docker?

↩ REPLY ⏱ 10 months 14 days ago ⌃

Rodrigo

My build has a asus rog strix b250f mobo and at least i haven't had a single issue with both vt-d and vt-x enabled.

↩ REPLY ⏱ 10 months 14 days ago

Hackintosher

The issues with VT-d preventing macOS from booting when away a long time ago so it's fine to keep it enabled after or even during the install.

↩ REPLY ⏱ 10 months 13 days ago

Jace

Would this be a better option than the MSI Z370M Carbon AC? Im having no luck getting anything but Sierra to run with this board and thinking of swapping it out for this ASUS.

↩ REPLY ⏱ 10 months 12 days ago ⌃

Hackintosher

Yes, definitely. I don't recommend MSI motherboards for beginners because their slightly more difficult to work with and have trouble with sleep.

↩ REPLY ⏱ 10 months 8 days ago

verveguy

Thank you for this awesome build guild. I followed the instructions and things worked first time without hassle. So far, appears to be completely stable.

ASUS ROG STRIX Z370-F
32MB G.Skillz Sniper DDR4-3200 RAM (2×16)
i7-8700K
GEFORCE 1080
SAMSUNG 970 EVO 1TB
WD 2T HDD
Acer 4K monitor

After getting it all up and running, I've told the BIOS EZ setup to try Faster OC mode. So far, HWMonitor reports 4.4GHz avg CPU freq and Geekbench gives a reasonable result.

Now to install Windoze on a second SSD… pointers on dual boot config for Clover appreciated.

↩ REPLY ⏱ 9 months 28 days ago ⌃

Lynx

What cooler do you have in this? I want to build my first Hackintosh for photography and like your build.

↩ REPLY ⏱ 9 months 20 days ago ⌃

verveguy

I went with an old school heatsink with fans. Noctua NH-D15 I think. Advice of the place I bought the hardware – too many problems with water coolers. Also it kept a USB header free which I needed for my plugin Bluetooth card. (see below). Make sure you get the high RAM design if you need it. Clearance matters.

When I put the motherboard on extreme overclock and ran Unreal Editor my CPU did get to 87 C. So I don't do that anymore. But otherwise great

↩ REPLY   ⊘ 8 months 21 days ago

Toby

What's the difference between the F and G motherboard? How did you get WiFi & Bluetooth working?

↩ REPLY   ⊘ 8 months 23 days ago   ⌃

verveguy

The F motherboard has no onboard WiFi or Bluetooth. I added a PCIE card. WiFi works but Bluetooth has been a big problem. Waiting on my third card now hoping it will be the one.

↩ REPLY   ⊘ 8 months 21 days ago   ⌃

davidsbran

do yu have the dsdt for the asus z370 f? can yu help me fix it ?..

↩ REPLY   ⊘ 1 month 7 days ago

verveguy

Updates re: Bluetooth in comments above.

Further update on attempt to upgrade this machine to Mojave this past week. Install was easy following instructions on this site. But audio completely broken afterwards and machine will no longer sleep at all. Also the lack of NVidia drivers is a major pain. Attenpts to fix these issues resulted in a machine that won't boot without panic. Managed to recover from that via Windows on my second boot drive. So I'm rolling back to High Sierra for now.

↩ REPLY   ⊘ 8 months 21 days ago

Fillcollins

Hello, what advice do you recommend on installing Hackintosh on the Asus Z370 Prime-P and intel core i3-8100?

↩ REPLY   ⊘ 9 months 21 days ago

Jozef R

I have the same motherboard with i5 8600K processor and with RX 480 gpu. Works great with Vanilla installation for more than half a year.

Regarding memory – you don't need to remap it, just put 2 modules (if you have only 2) in the A2, B2 slots instead A1 and B1 as in manual. Then it's working.

Also, if you have 4 modules in this mobo, modules in A1 and B1 are not reporting in macOS "About this Mac" window, nor in the System Profiler. However, those modules and full capacity is reported with sysctl and meminfo as well.

So this is just a cosmetic issue, which can be resolved by manually entering modules position and capacity in Clover via Clover Configurator, or manually.

Last but not least, if you have Asus Strix G WiFi version, just like on the other mobos with M.2 slot for WiFi (not the same as SSD M.2!!!), you can use M.2 to miniPCI adapter and original

slot for WiFi (not the same as SSD M.2!!!), you can use M.2 to miniPCI adapter and original Broadcom CS2 card for a fully native WiFi and Bluetooth solution. Original cover must be removed otherwise card with adapter will not fit.

You need this:
Card:
https://www.ebay.co.uk/sch/i.html?_from=R40&_trksid=p2050430.m570.l1313.TR1.TRC0.A0.H0.XBCM94360CS2.TRS0&_nkw=BCM94360CS2&_sacat=0

Adapter:
https://www.ebay.co.uk/sch/i.html?_odkw=BCM94360CS2%2FBCM94360CD+Card+To+NGFF+%28M.2%29+Key+A%2FE+Adapter&_osacat=0&_from=R40&_trksid=m570.l1313&_nkw=BCM94360CS2%2FBCM94360CD+Card+To+NGFF&_sacat=0

Longer antenna cable as original will not reach one port on card raised via adapter:
https://www.ebay.co.uk/sch/i.html?_odkw=BCM94360CS2%2FBCM94360CD+Card+To+NGFF&_osacat=0&_from=R40&_trksid=m570.l1313&_nkw=4Pcs+U.FL+IPEX+MHF4+to+RP-SMA+0.81mm+RF+Pigtail+Cable+Antenna+for+NGFF+Card&_sacat=0

↩ **REPLY**   ⊙ 9 months 21 days ago   ⌃

Jace

What version of Mac OS are you running currently?

↩ **REPLY**   ⊙ 8 months 24 days ago   ⌃

Jozef R

10.14 Mojave. Update went without any issues, except I had to replace apfs.efi driver with Clover native apfs loader.

Since I'm not using NVIDIA but AMD, no problems with drivers (which might probably never come from NVIDIA as it requires complete redesign of their drivers for Metal).

Actually, all updates up to 10.14 went absolutely fine, from 10.13.0 up to 10.14.0. Vanilla install, EFI created by myself, absolute minimum of kexts (just FakeFMC, Lilu, AppleALC, WhateverGreen and USBInjectAll with SSDT to block internal USBs for 15).

My machine has same motherboard and processor but with RX480 as I mention above. Also, 2 NVME SSDs in M.2. As I wanted to keep machine as silent as possible, I went with Fractal Design mini case, replaced their fans with 2 Noctua NF-14 at the front and used Scythe Koketsu II CPU cooler.

↩ **REPLY**   ⊙ 8 months 16 days ago   ⌃

Jace

Ive got the Fractal Meshify C mini. Do you have a link to a good guide for the SSDT?

↩ **REPLY**   ⊙ 8 months 16 days ago   ⌃

Jozef R

https://www.tonymacx86.com/threads/guide-creating-a-custom-ssdt-for-usbinjectall-kext.211311/

But if you have Asus ROG Strix Z370G WiFi like I do, you can use Pastryschef already created USB .aml file (like I did). But create EFI by yourself, Pastrys is full of non needed stuff. The less, the better.

https://www.tonymacx86.com/threads/pastrychefs-asus-rog-strix-z370-g-gaming-wi-fi-ac-build-w-i7-8700k-amd-vega-56.239969/

↩ **REPLY**   ⊙ 8 months 14 days ago

Jace

Ok Cheers, this will help me alot.

I tried a Vanilla install on my MSI Z370M, following the guide on the Reddit Hackintosh Sub after running into trouble with Hackintoshers EFI he made for one of his MSI boards, I could only get Sierra to install, nothing newer would install.

Im not sure what I was doing wrong, so i figured i needed to get deeper into it and create my own SSDT but god-damn its time consuming trying to work it out.

I just got my MBP back from a repair yesterday after swapping to this Asus Z370-G in my System, so hoping it will be easier to work with.

thanks for your help.

↩ REPLY   ⊘ 8 months 13 days ago

Jeremy

Thanks for linking to the adapter. It was not apparent what I needed and this clarified it.

↩ REPLY   ⊘ 7 months 27 days ago

Henning Wagner

First I want to say thank you! Thanks for your really beginner friendly article.

Last few weeks my actual computer had some issues. So I thought its time for a new one. I bought parts and then I found the hackintosh's and your blog. I've read it up and down many times now. 🙂

Can I use the Asus Z370-g without wifi to give it a try? Or is the wifi version a must. I dont use wife at all, with one exception, the IPad. I just plug the ethernet cable in and thats it. Fast, reliable, easy. (Bluetooth with a small BT stick and done?)

Again, thanks in advance!

Henning

↩ REPLY   ⊘ 9 months 14 days ago ⌃

Hackintosher

You can get the non-wifi version if you want the guide will still work just fine. There are issues with usb bluetooth dongles and macOS on a Hackintosh. If you want to use Apple Continuity without issues I would suggest getting the WiFI version since a Dell DW1560 will support both WiFI and bluetooth connectivity to your iPad.

↩ REPLY   ⊘ 9 months 14 days ago ⌃

Henning Wagner

Mmmhhhh my fight with the iPad auto-correction…. I use WIFI (not wife.. ggrrr) with my iPad only, but if you think the wifi board is better for a hackintosh, okay. Thank you for the advice!

Now to get a working mac fur the OS . Ebay was not friendly to me. ;-D

↩ REPLY   ⊘ 9 months 13 days ago

Toby

Thanks for posting this awesome build. My current iMac is getting a bit old and I'm going to build a hackintosh instead of getting a new one.

Can I purchase a WiFi/Bluetooth module instead of replacing the one on the motherboard. If so can I buy the motherboard without WiFi?

What's the difference between the F and G motherboard? Will they both work?

Thanks!

↰ **REPLY**   ⏱ 8 months 23 days ago   ⌃

verveguy

I went the F route (no wifi or Bluetooth). Added a card. WiFi good but Bluetooth not going so well yet. Waiting on third miniPCI card now

↰ **REPLY**   ⏱ 8 months 21 days ago

Brian Nagieer

Hi any chance you will be doing a Mojave install with this motherboard? Or if you could post the EFI for Mojave.

↰ **REPLY**   ⏱ 8 months 16 days ago

kal

when I select boot Mac OS install ….. apple logo shows then restart
and I did exactly the same config

↰ **REPLY**   ⏱ 8 months 14 days ago   ⌃

Matt

Hey, I had the problem as you. I couldn't go past the apple logo "loop" on the UHD 630.

For it to work, I had to add this kext: FakePCIID_Intel_HD_Graphics.kext.

↰ **REPLY**   ⏱ 8 months 5 days ago

Steeve

If I use these motherboard instead, can I configure it in the same way ? I'm brand new in this world…
ASUS TUF Z390M-Pro Gaming (Wi-Fi) LGA1151 (Intel 8th and 9th Gen) DDR4 DP HDMI M.2 Z390 Micro ATX USB 3.1 Gen2 (mATX) Motherboard
Thank you
Steeve

↰ **REPLY**   ⏱ 8 months 1 day ago

jonas

Great tutorial indeed, thanks! 👏 🚀
Got it running without a dedicated nvidia (980ti). Will give it another try later on.

↰ **REPLY**   ⏱ 7 months 30 days ago

Jeremy

Great build guide. I ended up building a very close approximation to this build and like it a lot. The guide helped with the setup. I went with a later version of the cooler that has dual fans. I also got a modular psu to cut down cable clutter. I did two sticks of 8Gb dimms and did not have to remap memory.

↰ **REPLY**   ⏱ 7 months 27 days ago

Yuesong

Hi, thanks for your guides and all the hard work!! Really appreciated!

I just started to get my hands dirty with hackintoshes and decided to follow one of your builds to the letter to ensure performance and stability.

Just wondering, will this setup work with a RX 580 graphics? I saw your other post (the ASUS maximus hero one), and I was just wondering if I have the option to upgrade this setup to a dedicated graphics later if I want to?

Thanks!!

↩ REPLY   ⏲ 7 months 25 days ago

jdog12

Awesome guide, is there any way you can post your kexts for this build? I have the exact same hardware and when I put the computer to sleep I cannot wake it up again. The keyboard is NOT plugged into one of the red USB ports.

↩ REPLY   ⏲ 5 months 22 days ago

JOEL JACINTO

Any fix on sleep/ wake with IGPU?

↩ REPLY   ⏲ 3 months 28 days ago