

Gaming PC Setup



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Introduction

In 2014 I experienced the PlayStation 4 error code **CE-34878-0**. It would constantly crash my games. Since it was a general error code there was no identifiable source of the problem, and the solutions varied. I restarted the PS4, changed network connections, reverted to factory settings, reinstalled the BIOS, and replaced the storage device but nothing worked. Instead of replacing it with another console I decided to build a gaming PC and did so in 2016.



Initial Build (2016)



Final Build (2024)

Current Specs

Case	Nanoxia Deep Silence 5 Rev B. Full Tower	RAM	16GB(4x4GB) 2400MHz Corsair Vengeance LPX
CPU	Intel Core i7-5820K	SSD	250GB 2.5" SATA Drive 1TB Crucial M.2 NVMe
GPU	MSI GeForce GTX 1070	HDD	2x 1TB Seagate
MB	ASUS X99 Sabertooth	PSU	Corsair RM750

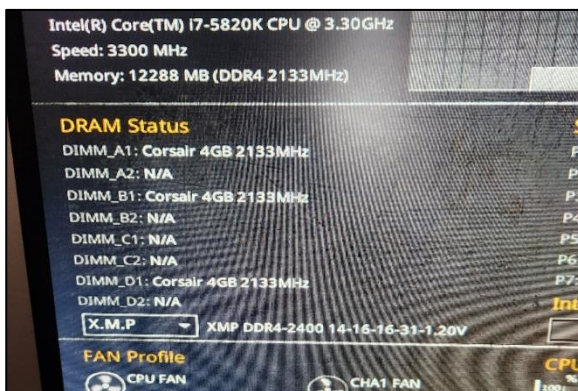
Issues

Could not connect to my home network:

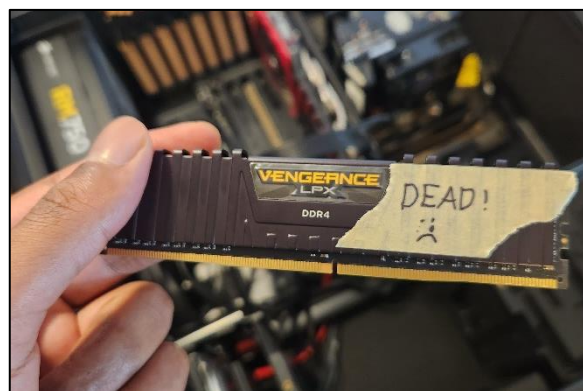
- 1) Ethernet cable was secure and swapping it did nothing
- 2) Ran the network troubleshooter
- 3) PC was unable to obtain an IP address
- 4) Learned that the network admin (my dad) disabled DHCP
- 5) The solution was to have him assign me a static IP

My PC only recognized 12GB of RAM when it should have been 16GB:

- 1) Removed and reinserted all four sticks of RAM
- 2) One of the sticks didn't appear in the BIOS
- 3) Changed the frequency from 2400MHz to 2133MHz in the BIOS
- 4) Tested each RAM slot and stick
- 5) Learned that one of the sticks died so I had to replace it
- 6) The system didn't recognize the replacement stick
- 7) Pressed MemOk! button on MB but the issue persisted
- 8) Removed the onboard battery and cleared the CMOS RTC RAM data
- 9) The solution was to update the BIOS



Missing RAM in BIOS



Dead Stick of RAM

Upgrades

Added a 120mm fan to the bottom of the case:

- Increased fresh air intake

Added a 1TB Seagate HDD and setup both my HDD into a Raid 0 array:

- Speed over redundancy for gaming purposes
- Noticeably faster load times

Upgraded my OS drive from a 250GB Sata to a 1TB onboard M.2 SSD:

- More space for OS and applications
- Noticeably faster load times

Installed a PCIe Wi-Fi adapter:

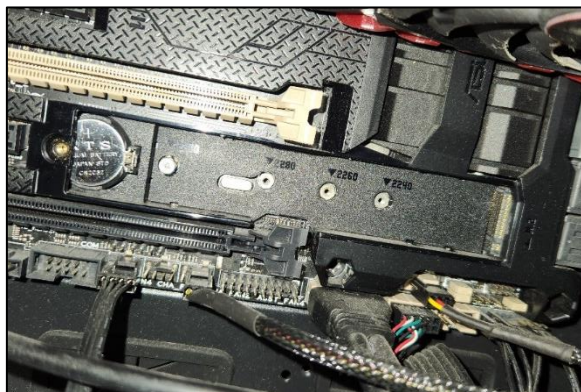
- PC can now connect to Wi-Fi and Bluetooth devices



Bottom Fan



Storage Devices



M.2 SSD Socket



Wi-Fi Adapter

Conclusion

Building my own PC has been a very positive and influential experience. So influential in fact that it's what caused me to pursue a career in technology. I am now able to tinker with other electronic devices such as controllers, laptops, switches, phones and other devices. I have enjoyed gaming for a very long time now and owning a gaming PC has enhanced my appreciation for it. I do plan on building a new PC if my current one starts to struggle running the latest games. This will, no doubt, continue to be one of my most expensive hobbies.



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