

What it was actually like building a PC

Pre-Work

I began this process because the last two PCs I purchased were pre-builts. I didn't mind them, but my friends had all built their own PCs and said it was easy and could save me some money for the same performance. The issue that necessitated this build was a failing motherboard on my current pre-built PC.

The pre-work process took about 2-3 months. I spent a lot of time watching YouTube videos usually just using the search terms like "Best \$2,000 gaming build". The channels that got me started were GeekaWhat and PC Builder. I eventually gravitated toward PC Builders videos because I felt he had a really good grasp of what was good value for the money.

After watching these videos, I began to understand what parts were compatible with others, which parts were good values, and what sort of resolution (1080p, 1440p, 4k) you could expect to get for certain price points. I ended up deciding that 1440p seemed like a sweet spot and set myself a budget of \$1,500 for just the PC portion and \$2,000 with monitor included.

Buying Parts

I knew that nailing down a GPU would be the most difficult in the current market. I spent weeks waiting for price drops that never materialized. In one of PC Builders videos (Decembers GPU / CPU market update) I saw that the Radeon 6800 was at the top end of his 1440p card list. They ended up having one on sale through NewEgg for \$509. This was pretty much MSRP and I hadn't seen one available before. I purchased it and began fleshing out the rest of my build.

I knew that the GPU would be my bottleneck, so I didn't overspend on my CPU. I ended up picking up a Ryzen 5 5600X for about \$163. I probably would have been fine with a 5600 but the X was only \$20. I'll go further into this in my lessons learned section.

The rest of the build was pretty much a carbon copy [of PC Builders 5600X build](#). I spent a little more to get name brand RAM and storage but still stayed within my budget. I also went with a different case. Here is my final build with pricing.

Product Type	Product	Price
CPU	AMD Ryzen 5 5600X	\$177.49
GPU	ASRock Radeon RX 6800 Phantom Gaming graphics card with 16GB GDDR6	\$555.38
Motherboard	ASUS ROG Strix B550-F Gaming Wifi II	\$223.23
Ram	Corsair Vengeance LPX 16GB (2x8GB) DDR4	\$71.86
Ram	Corsair Vengeance LPX 16GB (2x8GB) DDR4	\$71.86
Storage	Samsung - 980 PRO 1TB Internal Gaming SSD PCIe Gen 4 x 4 NVMe	\$141.56
Case	Corsair 4000D Airflow	\$114.33
Cooler	CoolerMaster MasterLiquid ML240L	\$91.48
Power Supply	Corsair RMx Series (2021), RM850x	\$150.27
Misc	Additional Fans	\$8
Misc	3 way fan splitter	\$8
PC Total		\$1,613.46
Monitor	LG - 27" UltraGear QHD	\$381.14
Grand Total		\$1,994.60

Assembly

I spent several hours a day for three days completing this build. [The Linus Tech Tips comprehensive PC build video](#) was a life saver. I normally don't like this channels videos but this one was incredibly well done.

Day 1 was just getting to the dry run of turning on the PC. Basically, all of the motherboard assembly, cooler, and power supply without putting it in the case. Everything ran great and came together easily.

Day 2 was getting everything into the case and turning on. This went pretty well with only one mix up. I plugged the CPU cooler fan into a secondary fan header instead of the main one. After chatting with my friends, they guided me through this and everything else went great. They all mentioned that this was one of the main things that constantly gets glossed over in most PC building videos

Day 3 was getting everything setup on the desk and loading the OS. Nothing really of note here except that it is now up and running.

Lessons Learned

1. Make sure to plug your CPU cooler fan into the main fan header.
2. Areas I could have saved money:
 - a. Only get 16GB of RAM
 - b. Name brand isn't necessary for RAM and storage, but I had the budget, so I went for it.
 - c. Some of the items I purchased did end up going on sale. If you are not in a huge hurry, you could save some money by being more patient.
 - d. Ryzen 5 5600 would have been fine for this build but again, I had the budget.
 - e. A cheaper motherboard would have worked but I wanted one with upgraded audio.
 - f. A less powerful PSU would have been fine for this build, but I wanted to have a little room to upgrade the GPU if needed.
3. If I had to do this again, I would have combined Day 1 and Day 2 processes if able. I ended up cleaning off the thermal paste because I wasn't sure if having it hang out for a day was a bad idea and it was kind of a pain.

Conclusion

Overall, I was happy with the results of this process. I now have a 1440p PC that can handle most games at higher settings. It has room to grow if necessary for the next couple years and I have a newfound confidence to be able to make those changes as they come. I also stayed within budget even after tax.