

Forum:[Hack Forums](#)

Thread: [Build Your First Gaming PC Help Thread](#)[PM for custom build help]

GripeseE - March 23, 2018, 10:49 pm

Looking to build a PC, and don't know where to start?

This guide will surely help you

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1. Motherboards + CPU

Quote:"A motherboard is one of the most essential parts of a computer system. It holds together many of the crucial components of a computer, including the central processing unit (CPU), memory and connectors for input and output devices"

Quote:"CPU (pronounced as separate letters) is the abbreviation for central processing unit. Sometimes referred to simply as the central processor, but more commonly called processor, the CPU is the brains of the computer where most calculations take place. In terms of computing power, the CPU is the most important element of a computer system."

We'll be looking at a few options today, we're going for a budget gaming build that'll still be able to handle triple A games at our price point.

We will not be looking at motherboards supporting AMD CPU's for gaming today. (If you'd still like an AMD processor to do more than just game pm me if you need help)

We'll be looking at the Z-Series which supports the i7 line of processors for our gaming build today.

Z170 - 6700k - Hard to find in hardware stores, but might be able to pick it up for cheap off craigslist/ebay

Z270 - 7700k - Still readily available in hardware stores such as Microcenter can also find deals on craigslist/ebay

Z370 - 8700k - Available in most stores/webstores as long as its not out of stock

We will be basing today's Gaming build on these motherboards.

Your starting price for these 2 bundled up = \$460 (Without discounts, some stores offer bundle discounts discussed later in the guide)

2. RAM

"a type of computer memory that can be accessed randomly; that is, any byte of memory can be accessed without touching the preceding bytes. RAM is found in servers, PCs, tablets, smartphones and other devices, such as printers."

Since we're building a budget gaming PC, we're not going to be needing too much ram but we also don't want to buy too little.

For our build, we will require DDR4 type RAM

We want to start our with 8 Gigs of ram (why?) You can certainly upgrade this in the future but 8 gigs is enough to get you off your feet for your very first build.

We'll be buying one single stick of 8 gig ram so we have the option to add more sticks in the future, this should set you back 80-100 \$

Current Cost of Build: 545

3. Graphics Card (Find the right deal)

Quote:"A graphics card is a type of display adapter or video card installed within most computing devices to display graphical data with high clarity, color, definition and overall appearance. A graphics card provides high-quality visual display by processing and executing graphical data using advanced graphical techniques, features and functions."

The most sought after part of this guide (Maybe)

With all the cryptocurrency mining going on, the prices of many graphics cards have soared sky high and in most cases sold out and expensive. However, you can still get your hands on a decent graphics card if you know the right place to look.

Your graphics card choice will be one of the distinguishing factors that can make your build a 800 dollar build, or a 2000 dollar build or even beyond. Graphics cards range and vary in prices, so I will provide to you a detailed summary of what card to get, what to expect and at what price point.

GTX 1060 6 Gig Model + Deals on other cards: Sitting @ 300-400 Dollars (quite expensive) This price can be brought down to regular MSRP if you live in the states. Many participating MicroCenter stores offer regular price to people who are buying COMPLETE BUILDS from their store and are not buying for the use of mining. Which means if you want a 1070/1080/ti they also offer these at regular price as long as you're looking to build a full PC, they stock a few extra cards in the back for people specifically looking to build a PC that they don't display online, so if you live near a microcenter be sure to hit them up if you're looking to build.

However, my final verdict on a decent card you can pick up for an alright price would be the 1060 which is perfectly capable of playing on high and sometimes maxed out 1080p

Current Price of Build:745-??? (depends on card)

4. Coolers

I personally recommend you go with Air Cooling for your first build, easy to setup no hassle once its all in place.

Without a doubt you're going to want to pick up a: Cooler Master Hyper 212 EVO - CPU Cooler with 120mm PWM Fan which goes for about 30 dollars. Will keep your CPU fairly cool and isn't too loud

running at max speed.

As for case fans, your case will have plenty of fans, enough for what we're doing.

Current Cost of Build: \$875-(depends on GPU)

5.Storage

We'll be looking at 2 possible setups for storage today. One will be more budget sided, while the other will be a bit more expensive but a faster storage solution.

Setup 1: 60 gig SSD (For OS) + X TB HDD

Setup 2: X gig m.2 SSD + HDD

1. We're going to be buying a 2.5" SSD for you to have your OS in for faster boot times I personally recommend the Patriot Flare 2.5" 60GB SATA III Internal Solid State Drive which will cost you about 30 dollars, this SSD also has decent read/write speeds so it won't be a problem for your budget build. We're going to want a decent sized HDD for this setup so we'll also pick up a

https://www.newegg.com/Product/Product.aspx?Item=N82E16822178993&cm_re=2_tb_hdd_-22-178-993_-Product

Choose your size, they're all on sale.

2. For the slightly pricier setup, we're going with a m.2 SSD specifically from Samsung (Great read/write speeds) "SAMSUNG 960 PRO M.2/ 950 PRO" Which comes in 256(950 PRO only) , 512, 1tb, and 2tb sizes. + We can go with any HDD size you'd like as well for additional storage.

6. Cases

Cases, this will determine how your desktop will look. This choice is entirely up to you take a look at the different Mid/Full Tower cases on the market and choose one that you like the looks of. The more expensive the case, the more features LED's etc, it will have. You can completely cheap out here, or you can spend a lot of money on an amazing case. It's up to you, this won't affect performance much.

Also look for cases that include space saving designs that allow you to run cables through the back of the chassis etc.

7. PSU

Quote:"A power supply unit (or PSU) converts mains AC to low-voltage regulated DC power for the internal components of a computer."

Regarding PSU's I personally recommend a 650W PSU (550w is fine too) so that if you ever decide to upgrade you won't need a PSU upgrade as long as the upgrade isn't too beefy.

Also a modular PSU is preferred, so you can detach any cables you won't be using in your build to save space. You're free to choose any 650W Power Supply as long as it's from a reputable manufacturer (CHECK REVIEWS) Modular is a plus point, so definitely look for those.

8. Shops / Deals / Resources

Firstly, I'm going to list some of the major web distributors that many of you are familiar with
Amazon
Newegg

Ebay

Frys.com

(If you know any native to your country PM me and I'll add them to the list)

However, there are more options as to where you can find some of your parts.

Resources/shops:

Microcenter: Possibly the best place for you to find all the parts you want at a cheaper price. If you live in the states, check to see if you have a Microcenter near you as they offer many bundle deals when building your own PC including deals for a new GPU (They keep GPU's in stock in the back if you ask and are building your own PC)

Craigslist: Buying second hand isn't always bad, but if you're going to be buying second hand have the seller use the part you're buying in front of you to verify it works.

Reddit's BUILDAPC: If you're looking for deals before you purchase parts, this subreddit almost always has great deals that you should definitely check out before you pull the trigger on any parts.

nowinstock: If you're going to be buying a part that is out of stock, this site will alert you when that item is in stock.

9. Pre-Builts

A pre-built PC in today's market might be a smart move. Many pre-built PC's include the sought after graphics cards you'd want at the regular price point.

There are many to choose from, if you find one and want a second opinion PM me and I'll give you my opinion.

Be sure to use Reddit's Build a PC and see if they have any pre builds listed as good deals.

By the end of this guide, your desired PC might vary in price.

If you have any questions or want me to change something PM me or Reply

Reaper- - March 23, 2018, 11:26 pm

Wow thanks for this man was really looking for this as I want to build a pc gaming

Gt403cyl - March 24, 2018, 11:14 am

Why the 212 over the H7?

There are other good options than the 960 for M.2 drives.

Quote:Your graphics card choice will be one of the distinguishing factors that can make your build a 800 dollar build, or a 2000 dollar build or even beyond.

I mean what?

The cost of the build is what makes it an \$800 or \$2000 build....

You can use a \$1600 CPU and a low end GPU for a server type build, so.....

Breeze26509 - March 24, 2018, 11:33 am

Quote:We'll be looking at a few options today, we're going for a budget gaming build that'll still be able to handle triple A games at our price point.

What price point?

Quote:We will not be looking at motherboards supporting AMD CPU's for gaming today. (If you'd still like an AMD processor to do more than just game pm me if you need help)

Why PM if you want an AMD CPU? Isn't this supposed to be a guide where you show new builders all the available options?

Quote:We will be basing today's Gaming build on these motherboards.
What motherboards..? Those are chipsets.

Quote:Your starting price for these 2 bundled up = \$460
Where did you pull this number from? What CPU did you use? What motherboard did you use?

Quote:but 8 gigs is enough to get you off your feet for your very first build
This is starting to become less true with newer triple-A titles. But if you don't play triple-A titles, it would be fine.

Quote:Your graphics card choice will be one of the distinguishing factors that can make your build a 800 dollar build, or a 2000 dollar build or even beyond
I swear I read this like 8 times and it made no sense to me at all.

212 EVO is overrated. Cryorig M9 offers similar cooling performance, is quieter, and easier to install at \$10 cheaper.

Wouldn't recommend anything less than 120GB for an SSD.
For ~\$12 more: <https://www.newegg.com/Product/Product.aspx?Item=9SIADF15ZD8084>

M.2 DOES NOT NECESSARILY MEAN FASTER. IT'S A FORM FACTOR.
You can still have SATA SSDs on M.2 (See: Crucial MX300, Samsung 850/860 EVO, WD Blue).
NVMe are the fast drives (Samsung 960 EVO/PRO, WD Black), and are awfully overkill for a gaming build.

Quote:You're free to choose any 650W Power Supply as long as its from a reputable manufacturer
Just because it's from a reputable manufacturer, doesn't mean it can't be shit. (See: low end Corsair PSUs)

GripeseE - March 24, 2018, 11:45 am

We were going for a basic gaming build, you don't need an amazing CPU to have gaming capabilities. I'm pretty sure a 6700k wont bottleneck a 1080ti etc. That's what I was going for here.

(Mar 24, 2018 11:14 AM)Gt403cyl Wrote: [\[CITE\]](#) Why the 212 over the H7?
There are other good options than the 960 for M.2 drives.

I mean what?

The cost of the build is what makes it an \$800 or \$2000 build....
You can use a \$1600 CPU and a low end GPU for a server type build, so.....
As for Breeze, yes I listed the chipset there are many types of motherboard models for said chipsets so it'd be easier just to name the chipset and have them go off that.
If you really wanted an AMD CPU, you can PM me and I'll help you out with that since.

For the z370 chipsets, I found a motherboard at 140 @ microcenter and a 8700k for 320 as well. If you got these 2 bundled there it'd be 30 dollars cheaper as well.

8 Gigs can handle most games atm, maybe not in the future.

For the graphics card, buying a 1060 would range drastically in price than if you bought like a titan

or something.

212 is overrated but it gets the job done.

m.2 is a lot easier to deal with, also the write/read speeds of it are pretty damn fast compared to other ssd's. That exact model I mean, not all m.2's are fast.

PSU, yeah that's true but I've had some shitty no name brand psu's die on me before. And we'd want a modular PSU which most of the more reputable known brands carry.

Thanks for the input, I'll try to edit some things.

Bvndit - March 24, 2018, 1:53 pm

Nice guide, im having a little issue though in regards with booting windows 10, my PC doesnt have a DVD drive so i got an external one. once i power my pc on its like my monitor doesnt acknowledge anything my pc. Any advice you could give please?

F11 - May 10, 2018, 11:58 am

I could definitely use your help. I'm going to pm you now.