**FAQ**

Why should I build a computer rather than simply buy a prebuilt one?

* Many people choose building a computer because simply **it will save you money**. Building a computer reduces all of the ridiculous fees built into the prebuilt prices to none.
* Building a computer allows **you** to pick the parts for **your** needs. Not a “one-size-fits-all” kind of deal. Focusing on gaming? Pick a good graphics card. Looking to store a lot of data? Simply put more of your budget into your storage.
* Prebuilt computers are notorious for pre-installing bloatware onto your pc, thus slowing it down. It could take several hours to remove all of the bloatware, and in those hours even a novice could build a computer.
* Warranties for individual products last much longer than one that comes with a prebuilt system.
* Building a computer is a great experience, and allows you to learn quite a bit of knowledge about computers.

Where should I begin?

1. Set a budget if you’re determined to build a computer
2. Use this site and others to learn about computer parts and which parts are right for you
   1. Keep in mind of ongoing deals on sites like newegg.com, or amazon.com
   2. If you have a microcenter near you, go there!

How do I use this site?

When on the homepage, by clicking on a computer part, e.g. the CPU, it will redirect you to the informational page on this site about CPU’s.

**CPU PAGE**Skip to: Intel/AMD/Aftermarket CPU Coolers

Basic Info about CPU’s

The CPU, or Central Processing Unit, is the brains of the computer. It is also referred as the processor. The CPU performs lots of calculations, really fast, thus causing it to heat up so it needs a fan just for itself! Everything that you see on a computer has gone through the CPU, imagine it as a bridge. CPU’s are constantly being replaced by newer and better versions, and often times even new bridges (a bridge is referred to the connection between the motherboard and CPU) are made to maximize a CPU’s performance. When choosing a CPU, look at the number of cores, the Ghz (speed the CPU runs at), and whether it is overclockable or not. To overclock a CPU is to make it run more calculations than the manufacturer recommends, which is alright as long as you have the proper cooling system for it.

Intel CPU’s

Intel CPU’s have a reputation of power, especially for their non-outrageous prices. For tasks such as gaming, Intel CPU’s are much better to get than AMD’s current offerings. Intel’s chips have a higher price when being compared to AMD, but their price is payed by frames per second in their games, editing software, or other programs that are CPU intensive.

AMD CPU’s

AMD CPU’s are renowned for their cheap price/performance ratio. They make very high quality cheap processors, and amazing expensive cards that will destroy anything you throw at it for years to come. By choosing AMD, you choose price over performance, but make sure to buy an AMD-compatible motherboard!

Aftermarket CPU Coolers

Aftermarket CPU coolers are CPU fans, whether water cooling or not, that you buy separately from your CPU purchase. These fans perform much better than the stock fans that come with Intel and AMD products. By purchasing an aftermakert CPU cooler you allow the room for overclocking, so in years to come when your CPU will struggle with the modern games, simply overclock it and your fan will do the dirty work. Know your limit when overclocking though, great external links are in the footer.

**GPU PAGE**

Skip to: nVidia/AMD

Basic Info

The Graphics card is sort of like a mini motherboard package in one. It holds a GPU, or graphics processing unit, and a fan specifically designed to cool it. Graphics cards are specifically designed for optimizing a user’s experience visually. Modern day programs are putting more and more pressure on graphics cards as they have become many times more powerful, which only stresses the importance of a strong graphics card. The two main competitors in nVidia and AMD, which is also present in the CPU market. The most basic part of choosing a graphics card is choosing the cooler. It is almost never recommended to buy a nVidia from nVidia, it is always the best to buy a card from a company that has added their own cooler and fans. When you buy a non-stock card you usually pay the extra price for the boost in cooling that the fans offer.

nVidia Cards

nVidia graphics cards have a high reputation for performance, yet tend to be costly. nVidia cards have pioneered the 3D graphics world, so if you’re looking for that, choose a nVidia card rather than an AMD. nVidia cards also feature PhysX, a tool for beautiful and seamless physics in modern games that use it to their full advantage. Modern games such as Borderlands 2, and Battlefield 3 are optimized to run PhysX.

AMD Cards

AMD graphics cards have an extremely good price/performance ratio. Up to the price of around 350$, choosing an AMD video card is the right way to go. Their graphics drivers in the 7XXX series dominate nVidia cards at that level. AMD cards are very good at allowing overclockers new options to push out an amazing amount of performance. However research before even trying to overclock, overclocking can easily ruin your rig if done wrong.

**POWER SUPPLY PAGE**

Skip to: How much Wattage is needed

Basic Info

The most important piece of advice I can give you on choosing parts is this next sentence. Do not save money when buying a power supply. Weird right? If you have a power supply in mind, and it’s on sale then save money. But if you’re willing to downgrade your power supply to a cheaper one then don’t do it. The power supply has the power to ruin your entire rig. Imagine having an uncontrollable amount of lightning going into a lightning rod, then powering your computer. You’d want a pretty high quality lightning rod, right? Your power supply does the same. It takes the uncontrollable AC power and controls it into beautiful clean small power into and sends it along a rainbow path to your parts.

Enough of the metaphors, but seriously do not skimp out on your power supply. Power suppliers are rated into ratings that show the efficiency of the magic box. 80 Plus efficiency ratings are used to certify that products have more than 80% efficiency at 20%, 50%, and 100% of rated load. This means that PSU’s will waste 20% or less electricity as heat at the specified levels. 80 Plus ratings are also divided into 6 levels, 80 Plus, 80 Plus Bronze, 80 Plus Silver, 80 Plus Gold, 80 Plus Platinum, 80 Plus Titanium. Getting a bronze or above is extremely recommended, since you are paying for long-lasting quality.

How much Wattage you need

Many people buy and waste money by buying power supplies that contain many hundred watts over what they need. There are websites online, such as pcpartpicker.com, that estimate your wattage. It is best to go and add 300 watts to your estimate, in case you wish to overclock or add another graphics card.

**RAM PAGE**

Skip to: Deciding the amount of RAM

Basic Info

RAM stands for random access memory, and is where your computer stores your temporary files. For example, if you’re playing a game, your pc would store the game on the RAM because sifting through the RAM for a file is much faster than sifting through a hard drive or SSD. DDR5 RAM is faster than DDR3. RAM’s speed is also measured in MHz, with the more the better. CAS latency is used to test the “slowness” of your RAM, so picking modules with low CAS is better.

Deciding the amount of RAM

If your desktop is going to be used for gaming, then getting anything over 8 Gb is simply unneeded , but if you use or think you will use editing software of any kind, or any program that is very large, then you will benefit from a higher amount of RAM. By storing files on RAM, the program will run much, much faster than sifting through the hard drive.

**HDD/SSD PAGE**

Skip to: SSD

Basic Info

Hard drives and SSD’s, or solid state drives, are used to store data. Hard drive essentially runs on disks, like extremely advanced smaller and heavier CD’s. A hard drive’s speed is measured in RPM (Rotations per minute), which basically states how fast the disk spins. If it rotates faster, then the disk will read it faster. Storage these days are common in Terabytes, or 1000 Gb, which 20 years ago was thought impossible to obtain. Personally, I recommend getting over 1 Tb, unless you love spending your time uninstalling old programs.

SSD

Solid state drives are an extremely new piece of technology, and work by magic from only Gandalf himself. These boys run so fast they’re 7 to 8 times more expensive than hard drives, but are worth it. Putting an OS on it, and a couple of your favorite programs that you access commonly will decrease your wait time by a lot.

**MOTHERBOARD PAGE**

Basic Info

**CASE PAGE**

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