

Welcome to Recommend Desk!

**CPU** – The central processing unit of a computer can be thought of the brain of the computer. It is where all instructions of a program are processed. Processing can be either mathematical operations, like addition, subtraction, multiplication, or division, or assigning values to certain spots in memory. The processor can't handle all of information at once, so it uses Random Access Memory (or RAM) to store the values it needs later. Please refer to RAM in the "Learn" section of this website to learn more.

Historically, all commands flowed thru the processor (another name for CPU) to receive answers to their instructions. Now, other pieces of hardware (like the graphics card) can also process instructions to help spread the work load of the computer.

**Motherboard** – The motherboard of a computer is where all the pieces come together. The motherboard holds pieces like the CPU, RAM, Graphics cards, and other cards to all complete functionality. A motherboard must be new enough to have the right pin count for a CPU. It must have enough slots for all the sticks of RAM you will need for your build. It must have enough PCI slots for all your extra cards like graphics cards, physics cards, sounds cards, or even network cards. A motherboard carries all the information from one piece to the other and allows for flawless communication. It should also be properly powered by a Power Supply which you can refer to in the "Learn" section of this site. A motherboard sometimes has "onboard" pieces, such as audio jacks or a network interface. It all depends on the board.

**RAM** – Random Access Memory is the computer resource that stores all values of currently worked on programs. It works hand in hand with the CPU and is like the short-term memory of that processor.

Without the RAM, the CPU would have no where to write the answer to all the problems that it solves.

RAM is one of the easiest components to install and to buy for when it comes to a PC build. Usually, one can say they have 8 Gigabytes of RAM and the rest of the people listening can easily gauge how effective

that is for the PC. Low amounts of RAM can hinder a computer significantly causing it to be quite slow. If you run intense games or like to have a thousand tabs open in your web browser, upgrading your RAM is a great place to start your investment.

**Graphics Cards** – A graphics card is an all in one piece of equipment that is specifically designed to handle all the graphics on your computer. It takes away the strain of intense editing projects or games away from the CPU, so your processor can handle other tasks. A graphics card has its own processor and set of RAM. This is important when buying a graphics card because you must take all those specifications into account. Graphics cards plug into PCI express slots on your motherboard and you should check to make sure if you have the required slots for the card. It is not guaranteed a card will just work with your computer unless you have the appropriate PCI slots and room in your case. A good graphics card can be the hallmark of your computer build but must work in tandem with your motherboard and other pieces of your computer to receive good results.

**Power Supply** – A power supply is the piece of your computer that regulates the power from the wall to the rest of your build. More power doesn't always mean that the supply is better but having enough power for all the components of your build is crucial. You also need to have a power supply with all the right connectors for each of the pieces of your build. Most of the connectors will go straight into your motherboard, but if your missing a connector, the card without power will be rendered completely useless. Power supplies will also have different qualities so be sure to check them out when purchasing a power supply.

**Case** – A case is a piece of the computer build that is often overlooked but huge when buying the parts for your build. Not only must it look cool, but it must be able to store all the pieces of your computer. It must be able to fit the motherboard, power supply, and all your extra cards that you are planning to throw in there. Air circulation is also important to ensure that none of your pieces overheat. The proper

number of fans and spots for those fans is an important aspect as well. You need to also have enough slots for your hard drives and USB ports to ensure you have a build that fits you.

Monitor – A monitor is an easy part to pick up for your build because of its all in one nature. All you must do is pick the one you like and make sure you have the right cords to A. power it and B. connect it to your graphics card or on-board graphics. After that you can pick (almost) any size or brand you like!

Peripherals – A peripheral is any extra equipment like mice and keyboards that are used with your build. Examples of peripherals are mice, keyboards, USB devices like external hard-drives, external network cards, headphones or speakers, and other devices. Usually these devices are connected USB, but may connect with headphone jacks, microphone jacks, or other connectors. Make sure when assembling your build to have enough jacks (whether USB ports or other ports) to plug in all your peripherals.

Network Connections – Another important piece to your build is your network connection. If you have a standard setup, your motherboard should have an ethernet port for you to plug in your ethernet cable. This cable plugs into your router and away you go! If your network is not as simple as that, you will have to contact your network administrator. If you did it yourself and you are the network administrator, then you will have to see where in your setup to plug in. Most of the time, you must find a way to the switch or router in your network. Sometimes you may have a wireless card or a peripheral that connects to the network with Wi-Fi. If your home or work network supports Wi-Fi, you should be good. Adapting to your network can either be simple or complicated; it just matters what your network is like.

About Me – My name is Eric Mlynar and I am from Michigan. I am a student at a college in Idaho and I am studying Computer Information Technology. I am also an aspiring developer and IT professional. In my free time, I like to visit with friends, play video games, run, and enjoy life. Someday, I wish to earn enough to be able to start a charity. This charity is to be determined, but I have a few ideas.