

## **Basic Computer Parts and their Function**

It can often be confusing when you are thinking of buying a computer as there is a whole language related to computer parts and their function. This article will explain the important parts of a computer and what you should look for in these parts when you buy a new computer.

A basic computer consists of a tower, operating system, monitor, keyboard and a mouse. A tower contains a motherboard, central processing unit (CPU), random access memory (RAM), hard drive, compact disk (CD) or digital versatile disk (DVD) drive. Other devices such as scanners, printers, modems, graphics card and head phones can be added to allow the computer to perform more tasks.

The motherboard is a circuit board providing electrical connections between components inside the tower. It is also referred to as main board or system board. The motherboard is probably the most important part of the computer because without it none of the other components can communicate.

The CPU is the brain of the computer where most calculations take place. The CPU instructs other components of the computer. The speed of the CPU determines how fast tasks such as word processing or copying a CD, can be completed. However speed can also be affected by RAM.

RAM is where the operating system, programs and opened files are held while you are using them. If you don't have enough RAM your computer will be slow as there is not enough area to work in. RAM is volatile memory which means once the power is gone anything stored in the RAM is lost.

The hard drive is used to permanently store files so that you can access them later on. Unless you store files on a CD or thumb drive, all your programs and files should be stored

on the hard drive. Sometimes files can be lost from a hard drive if you do not properly shut down your computer. Some viruses can also cause the loss of files from a hard drive.

It is important to backup files even when you are storing them on the hard drive. Data can be backed up onto a recordable CD (CD-R) or a recordable DVD (DVD-R) using a CD/DVD burner. To store data on a CD or DVD you will need a burner as a drive is only able to read a CD or DVD. A DVD burner is preferred as it can burn both CDs and DVDs, whereas a CD burner can only burn CDs. DVDs generally hold about 4.7GB, which is 6 times more data than a CD, meaning large data files such as photos can be stored on DVDs. There are new DVDs called Blu-ray which can hold 50GB and HD-DVD which can hold 30GB of data.

Thumb drives or USB sticks are another way of storing data and range in capacity from 128MB up to 32GB. The advantage of thumb drives is they are small and easy to carry around, but they don't like static electricity. Static electricity will corrupt the thumb drive and you may lose files stored on it.

A personal computer needs an operating system. Most computers are sold with a Microsoft operating system called Windows. The latest version of Windows, Windows Vista, is still experiencing functional and compatibility problems, so the preferred operating system remains Windows XP. There are other operating systems such as Mac OS X and Linux. Mac OS X is the operating system of Apple and will not operate on a Windows PC. Linux will operate on any computer. There are many different versions of Linux and it is free, however I recommend Linux for advanced users as it is complicated.

To perform tasks on a computer you need to enter data into the machine and a way of seeing what you are entering. Equipment that allows you to enter or change data is called an input device. Input devices include a keyboard and a mouse. Scanners are input devices used to copy documents or photos into a computer so you can store an electronic version.

Output devices show what has been entered. The most common output devices are monitors, printers, headphones and speakers.

Modems are used to access the internet allowing data to be sent and received down the phone line in 'packets'. Each 'packet' carries a small piece of information from the webpage or email you are downloading. Once all the packets are downloaded they are turned into data and displayed on the monitor.

Nearly all motherboards have a built-in graphics adaptor. These are ok for the average user, but if you wish to do other tasks such as movies and games you might want to think about getting a better graphics card. A better graphics card gives you better pictures and smoother movement in video and games which makes the viewing or gaming experience a lot better.

When buying a computer the minimum specifications I would recommend would be 2GHz CPU, 1GB RAM, 80GB hard drive, a DVD-ROM drive and 128MB graphics cards. I wouldn't go lower than these especially if you are going with windows vista. But for better performance defiantly go higher.

If you are considering your first computer or upgrading an existing computer drop by and see Josh at the CTC in the old Commonwealth Bank building or call 6343 1720. Josh will give personal advice and can draw up a quote on a machine to suit your specific needs.