

## Things to Consider When Comparing Computers

### Processor:

There are two manufacturers of processor **AMD and Intel**. I sell primarily Intel, not that AMD is bad but I get the best support from Intel, if there should be an issue, they provide me with overnight delivery should I need a replacement.

**Speed or GHz** is only one factor in determining how well it will perform; the **cache size** on the processor significantly enhances the performance especially on more intense computing.

**Dual core verses single core processor** has a big impact on performance, with all of the anti-virus and spyware/worm protection that has to be installed on the computer to protect us from all the potential stuff that is constantly trying to get into our computers from the Internet. The virus protection can be scanning in one of the processor core's without impacting the speed of the things we want to do on our computer.

**Front Side Bus (FSB)** speed is also a major factor as it determines the speed at which the processor communicates with components on the motherboard.

### Memory:

The **amount of memory** is critical to the performance of the operating system. Often I find the cheap computers have undersized the requirements for memory. The **type and speed** of the memory also impact the performance.

Also important is the **number of available slots** for memory and how many of them are used with the existing configuration. If all available slots are used then you will have to remove the existing modules before you can upgrade which will result in a higher cost.

### Hard Disk:

The **size** of the hard disk is quite important, especially if the user has a lot of photographs or music (like an iPod). Both of these consume lots of space.

The **interface** that the drive connects to the computer is either IDE or SATA. SATA has two to three times the throughput.

The **speed** at which it rotates, most are 5400RPM but the 7200RPM models produces faster loading at boot up, starting applications or opening large files.

### **DVD drive:**

Yes every computer has a CD drive and all are CD-burners, most also have a DVD reader so you can watch a DVD. But now you should expect a **DVD burner** that does read and write both CD and DVD. The DVD industry confused most folks with all the different standards but you want a DVD burner that does both DVD-/+ media and dual layer. If the user is involved with lots of video and likes the latest gadgets you may consider Blu-ray but it is quite expensive.

### **Screen:**

The **size** of the screen is an important factor. The younger folks with good eyes can handle the smaller screens. If the computer is a laptop, and one that needs to be mobile, the larger the screen the more the computer will weigh. There are other factors like contrast ratios, viewing angles, brightness and response time. But most of these are not extremely important unless used for high end graphics like computer aided design (CAD) or gaming.

### **Video or graphics adapter:**

**Most integrated graphics** today are perfectly good for of the use like web browsing, word processing, email, simple photo editing.

But for those that use the **high end graphics applications** like computer aided design used by engineers, Photoshop graphics designers or those that enjoy gaming, the video adapter is critical.

There are two major graphics chips manufacturers ATI or NVIDIA. Both ATI and NVIDIA produce many levels of graphic chipsets. The upper end chipsets are the most costly but also produce faster and better graphics. Also you need to consider the amount of memory dedicated to the graphics and the kind of memory. There is some significant differences is memory speed and performance.