

'Living In a Tech World' Column

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Making Sense of Computer Descriptions (Part One)

There are not many major purchases that we make more than once or twice. But one that a lot of us make every 2-3 years is a computer. You have your primary computer, the kid's computer(s), a laptop and then the replacements for each of those.

Because the technology changes monthly the choices never seem familiar. You know the drill; you go online or to a retail store and look at the ads or the placards over the computer and see:

Desktop PC - Intel Pentium Dual-Core E5200 2.5GHz 64bit, 6 GB DDR2 SDRAM, NVIDIA GeForce 9500 GS 512, SATA 500GB 7200 DVDRW-LS, 10/100/1000, Vista Home Premium 64-bit SP1

Unless you are a practicing geek it looks more like a randomly generated password of letters and numbers than a product description. But it does tell you most of what you need to know. So let's break it down and consider what you should be looking for in a desktop computer. This week we'll explain the first half of the puzzle and then finish next week.

Intel Pentium Dual-Core E5200 2.5GHz 64bit

This is the CPU the central processing heart of the system. Intel is one of two brands you are likely to see and AMD is the other both with various model names. Each have their hard core enthusiasts but for most home users there is not much difference between the two companies.

E5200 designates the model of which there are dozens. *2.5GHz*, denotes the speed of the processor. In earlier times the speed number, higher the better, was the determining factor but now some processors do not even note the processing speed because there are other factors that can make a 2.5 GHz faster than a 3.1 GHz speed. *64bit* is another measure of calculation speed. Over the last year it has begun to be generally offered in PC's taking the place of 32bit systems. You will still see 32 bit systems but they are rarely noted in the description. Now we need to skip back to *Dual-Core*. Dual Core means that the CPU is made up of two processors. This has become the standard processor in mid-price range with the upper end processors being Quad-Cores.

All of this is about computing speed and how much you need depends on your use. In our on-line supplement we'll outline what is important relative to your proposed use but if your needs are basic like email and office programs and looking at photos occasionally a single core 32bit processor will work just fine. If you are considering gaming, video editing and other high end uses you should be moving to 64-bit but also understand a 32bit can be as fast as 64bit and a dual core can run as fast as a quad core because both of these depend on software to be written to take

(more)

advantage of the increased processing power. At this time, higher end programs are beginning to take advantage of 64bit and only a few of the newer games take advantage of quad core processors. That may mean you are buying more power than you need or can use or it may require you to spend additional money for software upgrades. But if you are trying to future proof your computer, give up. You will never get ahead of technical advancement by buying the high end you can add a year or two to the useful life of your purchase.

4 GB DDR2 SDRAM

This is the amount of ram (random access memory). I explained the importance of ram in a previous column ([http://vccdigital.com/columns/column two.html](http://vccdigital.com/columns/column%20two.html)), but briefly, when you launch a program it is stored in ram so the more you have the more programs you can open at once and the faster your computer will seem to run. DDR2 SDRAM indicates the speed of the chips. This is currently the standard, if there is such a thing in computers, but you will also see DDR3 and DDR4 modules. The most important things to know about ram is that it takes 1 GB to run Windows XP, 2GB to run Vista and the more the better EXCEPT, 32 bit systems only recognize 3GB in XP and 4GB in Vista but 64bit systems will recognize virtually any amount of ram you can plug in.

That gets us through the more complicated components of a computer. Next week we will take on the rest of the hieroglyphic disguised as a description.

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