

Computer Bits by Mark Eggert of Raad One Network Solutions, Inc.

Welcome to Computer Bits, a series of articles on computers and network information. This is another article with Questions & Answers. This month's question is: **What about speed? I don't think I need 2000 MHz. Do I?**

The speed of the Central Processing Unit (CPU) of a computer continues to get faster and faster. The fastest CPU is around 2.2 GHz or 2200 MHz. I believe that we're getting to the top of the speed range with the current technology. The speed of the CPU is directly related to the number of instructions it can execute per second. So the 2 GHz CPU can execute 2,000,000,000 instructions per second! Most business software doesn't require this much speed. In fact, if you look at the minimum requirements for Windows XP and Office XP you'll see that it's 300 MHz and 133 MHz respectively. So what does require this speed? Not much! Two Engineering/CAD applications, AutoCAD and Solidworks, only require 450 MHz. Actually to drawing in 3 dimensions or render a solid model may require a faster CPU. Also, if you are a multi-tasker on the computer you'll find that the computer operates better with a faster CPU.

So my recommendations for CPU speed are as follows. For a general purpose office or home computer the range is 800 MHz to 1.3 GHz and for an engineering or design computer the range is 1.3 GHz to 2.2 GHz. Two things that are a little more critical that speed are the amount of memory (RAM) the computer has and the quality of the video adapter. All of the software mentioned above have a minimum RAM requirement of 128 MBs but all perform noticeably better with 256 MBs. Also, for the engineering/design computer the video adapter will have a large impact on it's performance.

If you have a computer or network question you'd like answered and you think others would like to know the answer too, please forward them to me. My email address is meggert@wi.rr.com, my phone number is 262-679-7704 and my fax number is 262-679-7664.