Cyrix Technical Connection

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In the interest of timely advice and communication, we have decided to use the avenue of a weekly on-line newsletter to keep you, our very important customers, informed of what is going on within our company and what good things are happening here at Cyrix. We also want to offer a few helpful hints and suggestions in order to make your Cyrix experience as positive as possible.

How Good Is Your Memory?

The purpose of this column will be to discuss some very simple memory tests results. All we are doing is starting with a basic system, running our benchmark, adding more memory and running the benchmark again. The only thing that changes is the amount of RAM installed. We do not want to cloud the results by making other changes to the platform at the same time. In the weeks to come, we will discuss video upgrades and their impact on system performance.

For this test we are using an ASUS P5S-VM super socket 7 motherboard with the SiS530 chipset. AGP is supported but not being used. We are using the Cyrix M II – 266 (66 MHz for the host bus and a 3.0x clock multiplier), an STB Nitro graphics adapter and starting off with 32M of PC 100 SDRAM. The hard drive is a WD Caviar 32500 we have had around here for a couple of years.

The board does come with onboard video, but we didn't want to "reserve" any DRAM for video, so we are using the external video adapter.

The OS is Windows 98 and we are running the Desktop applications of Winstone 99 as our benchmark (the high-end applications will not run on Windows 9x but require NT).
The results are as follows:

SDRAM	32M	64M	96M
Winstone99	10.1	13.2	13.6
Percent Increase		32%	.03%
Overall Increase			34%

Next week we will look at simple a EDO memory upgrade on older motherboards and its impact on performance.

Upgrading Continued (Microprocessor)

In trying to make a point, I may have made assumptions that I shouldn't have. Socket 7 describes the pin-out and socket that all of Cyrix's currently shipping processors have. These have 296 pins and come in a PGA (Pin Grid Array) package to fit, pin for hole, into the socket. Other processor manufacturers are producing processors that are installed on a daughter card or adapter card. These cards have an edge connector that slides into a slot much the same way your video card would slide into a PCI or ISA slot. It is sometimes referred to as Slot One or Slot A depending on processor manufacturer. Socket 370 describes the latest socket for PGA type processors. Much like socket 7, but larger, socket 370 has 370 pins. So the point is made once again, that if you have a socket 7 processor and are going to upgrade to a non-socket 7 processor, then you will have to purchase a new motherboard that supports the processor form-factor. If you want to stay with your Socket 7 motherboard, then look at the different processors that Cyrix currently offers. They are all Socket 7 and will fit into the processor socket on your motherboard.
What do you want from a processor? Do you need the fastest of the fast or will something of moderate speed be just as acceptable? This is really a question that only you can answer. If you are going to be using standard desktop applications (word processing, spread sheet, presentation software) and keeping your checkbook on the computer and surfing the WEB for information with maybe an occasional cyber shopping spree, then you do not need to have the fastest processor out there. You may be able to keep your socket seven motherboard for a while longer by just buying a faster socket 7 processor. This should result in a very pleasurable computing experience. Most likely, even your game play on your computer will be acceptable. There might be some other upgrading you can do to your machine in addition to the processor that could help the performance.
There are other features in the processor that may of interest to you and we will be checking some of these out in the coming weeks. It will probably be very elementary for many, but there will be some who have never been exposed to some of this processor technology. Hope you enjoy the journey. See ya' next week.

Tech Tip: The Right Motherboard

Take a close look at the specifications of the motherboards to make sure that the processor you want to use is supported by the motherboard you are interested in. Don't assume that because it supports a faster processor that it will automatically support a slower one.

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