

Overclocking your Processor

Overclocking, which was once the domain of power users and high-end gamers, has now gone mainstream. It's true that overclocking might prove to be a shot in the arm for your CPU. However, if things go awry, you could well have a fried CPU.

There are scads of information regarding overclocking on the Internet. But sadly, most of the websites tout overclocking as a walk in the park, misleading users by concealing the associated risks. A computer novice, unaware of the risks involved, may set out to overclock the processor based on some advice he got from such a website. This really makes me cringe. Is the whole process of overclocking a no-brainer?

In simple words, overclocking your processor requires an alteration in the hardware settings in order to make it run faster than the manufacturer's specification. The ideology is that the manufacturer's ratings are a result of stringent trials and tests performed against the CPU. Then onwards, the CPU is tagged with a particular clock frequency at which it can take up substantial workload on a regular basis without malfunctioning. This clock rate is often a notch lower than the maximum a CPU can sustain.

PC enthusiasts perceive this as a windfall, and try to breach the frequency barriers set by the manufacturers. This can be a viable option for CPUs which can be easily overclocked, since some CPUs have better overclockability than others. But in general, overclocking your processor can be a risk-prone endeavor.

Overclocking is also employed by a few unscrupulous component resellers. They overclock a processor, falsely remark it as a high speed processor, and then onwards sell it at profit. Major brands like Intel strive to curtail such swindling acts. Intel has employed a mechanism called CPU locking, where the clock multiplier is set to a permanent value. Therefore, overclocking your processor, especially if it's an Intel product, is a bit harder than usual.

A point to be noted is that Intel's CPU locking mechanism has much to do with unscrupulous vendors rather than end user overclocking. But at the end, it looks like you might have to seek out other means for overclocking your processor.

Let's say you really want something extra from your existing CPU, but you are on a shoestring budget, and the best possible option is overclocking. Even if you opt for overclocking your processor, you need to take a few precautions, lest it can be a real bummer for you.

The conventional heat sink and CPU fan won't do much good, since an overclocked processor dissipates a lot more heat. If not dealt with properly, you could face frequent hang ups, system crashes and random reboots. Though a rarity, your processor could also suffer permanent damage. It is recommended that you install an effective cooling mechanism for your overclocked processor, such as water cooling or Peltier cooling. Also ensure that you possess a computer case that enables proper ventilation for an efficacious cooling.

What I have presented here might appear dissenting to a few overclocking zealots, but it's the truth. I suggest you carry out some basic research before you plan on overclocking your processor.

Source: <http://www.articlecircle.com>

About the Author

Nicholas Spriggs at www.desktop-computer-guide.com is dedicated to providing up to date and accurate information in the computer and technology field. Check us out or subscribe to our newsletter at www.desktop-computer-guide.com/ezine.html