

Should overclock to increase performance for gaming PC?

Overclocking your gaming PC sounds complicated and impressive, but in reality, overclocking is only achieved with a few programs and perhaps a few more peripherals.

This process comes with benefits and drawbacks. In this article, TipsMake.com will review them and help you decide if you want to overclock your gaming PC.

What are the benefits of overclocking?

The immediate advantages of overclocking may seem obvious - more power at a relatively low cost - but let's explore these and some other benefits of overclocking.

Performance upgrade

The first and most obvious benefit of overclocking is the reduction in performance from your hardware. By overclocking your PC, you'll get more frames per second, which can cut down on all load times and game at higher resolutions. This extra power comes with a price, which we'll discuss later, but with the right know-how and additional hardware, everything is manageable.

Tools are available

With some relatively simple tools, you can squeeze more power through your GPU, CPU, and RAM and get the more performance you desire. To get started, check out TipsMake.com's CPU overclocking guide. Programs like MSI Afterburner can easily overclock the CPU and GPU using all the monitors you might need like internal temperature and power consumption. There's even a CPU and GPU stresstest feature to give you an idea of ?? how well you can overclock your PC.

Overclocking is financially beneficial

Having to spend a large amount of money to upgrade hardware is something that no one expects. With prices on the rise, you should try to keep old parts as long as possible.

Pushing your old hardware to the limit will often get it next-gen or close to the same performance. Not having to rummage around to buy the latest gadgets is always an advantage, why spend money when you can get more out of what you already have?



There is a lot of support

If you decide to go ahead with overclocking your PC, you'll find lots of helpful forums, subreddits, and videos that walk you through the process. If you're planning on doing overclocking, it's almost certain that someone has done this before, made all the mistakes and posted information online about it. Research is key to anything related to building and buying PCs. The same is true for overclocking.

Why not overclock?

Overclocking saves money, boosts performance, and seems relatively simple to do. Why don't we all do it? There are a few things to consider.

Overclocking shortens hardware life

Using more power through any part of the PC will certainly make it harder to work. This is like, when you work hard, you need more rest. Parts of the PC get tired, too. Over time, the increased voltages that run through PC hardware wear them down. The extra voltage generates more heat and speeds up the degradation of critical internals. This leads to the second problem to consider.

Generate more heat



As the voltage increases, more heat is generated. That requires better airflow and heat diffusion. Increasing the temperature inside a PC without a proper solution can cause some serious problems, at least bugs and minor problems. An overclocked CPU can reach a temperature of 195 degrees Fahrenheit and still be considered safe, although closer to 175 degrees Fahrenheit or below is clearly much more appropriate.

If you're seriously looking to overclock your components, the investment in extra cooling is well worth it. Water cooling is a popular solution along with a good number of extra fans. Overclocking can mean a bit of a rebuild of your current PC depending on how much you want.

Increase power consumption

With higher efficiency, power demand also increases. As you demand more from your components, the voltage level will increase as well. This is obviously going to be a slight increase in your electricity bill, but the biggest concern will be whether your local power supply can cope with the increased electricity consumption. When you build a PC or buy a pre-built PC, make sure you know the expected voltage levels before overclocking.

When starting performance tuning, you must know that your power supply will have limits. Be careful not to exceed this as it can cause serious problems like unexpected shutdowns and even fire. You can learn more about the importance of the right power supply in our explanation of why PSU unit performance matters.



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Make sure you overclock properly

Sadly, it's not quite as simple as clicking a button and instantly having a perfectly overclocked PC. Knowing how to fine-tune each component and to what extent plays an important role. As mentioned before, MSI Afterburner can help assist you in this. Learn more in the list of the best overclocking software that TipsMake.com has suggested.

Aside from knowing what software to use and knowing if your components can actually be overclocked, not everything is possible and pushing them over the limit can be harmful. Looking up the exact manufacturer and model is always worth checking out. Let's see if it is suitable for further increase in capacity and performance.



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You may not be covered by the warranty

If you decide to go ahead and push your PC to the limit, it could affect regulatory benefits. Most manufacturers release their products that are set up to perform at their best for the longest time while also producing the best

results. If you decide to tweak your settings and push your gaming PC beyond its original use, the manufacturer reserves the right to refuse a refund if it breaks down.

So is overclocking worth it?

When looking at overclocking and seeing regular performance boosts dramatically, it's understandable to want to keep going. But the discovery that overclocking can take some research and learning to understand hardware can be intimidating to many. Thankfully, with online help available on videos and forums, anyone can become an expert in no time.

Of course, being able to avoid having to buy expensive and often hard-to-find hardware is a plus for anyone interested in building or enhancing PC performance. The downside to this is that you have to first learn how to monitor your components and then manage the heat output with things like additional cooling. With the right freeware, the efforts and time commitment can become negligible, and cooling systems are almost always cheaper than new hardware.

After considering all the points, it seems that overclocking your gaming PC is the right thing to do. Just make sure you take the time to understand the process and gather the right tools to monitor your gaming PC.

As you can see, there are good reasons to overclock your PC depending on whether you have enough time, patience and know-how to make it work. With the tools available and a little research, enhanced gaming performance can be within your reach.

You may need to invest a bit more hardware to keep critical components at the right temperature. The extra research you do, although time consuming, will be beneficial as it saves money and gives you better performance.

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