

# What is Turbo Boost technology? Which machine is equipped with Turbo Boost?

How is Turbo Boost technology understood? The content of the article will give you the exact answer about what Turbo Boost technology is, the easiest to understand, discover it now!

Turbo Boost technology is often integrated into laptops, but not everyone clearly understands its effects. So what is Turbo Boost? Therefore, in this article TipsMake will help you answer questions surrounding this advanced technology. Let's find out now.

## What is Turbo Boost technology?

**Turbo Boost**, simply understood, is a technology equipped by Intel for most of the processors that the company is releasing. This technology helps the processor have the ability to automatically adjust the machine's clock speed, thereby providing a clock suitable for the tasks the machine is performing and enhancing the user experience on the laptop.

Picture 1 of What is Turbo Boost technology? Which machine is equipped with Turbo Boost?

Applying Turbo Boost technology to the processor also helps save power and increase heat dissipation for the laptop. According to specifications provided by Intel itself, this technology can increase the laptop's power by more than 20%.

Specifically, when you perform heavy tasks such as playing 3D graphics games, programming, making videos, etc., this technology will automatically improve the performance of the device. When you perform light tasks such as watching movies, browsing the web, studying, etc., Turbo Boost automatically switches the computer to a low operating state to help reduce the amount of power needed.

## How does Turbo Boost work?

**Turbo Boost technology** works based on the main principle of automatically adjusting the clock speed of each independent core on the machine. This adjustment is suitable for all task processing needs on the machine. Thanks to this principle, the computer has the ability to increase power by 20% when needed and save energy when the computer is in a low operating state.

The machine is equipped with Turbo Boost technology, so when handling heavy tasks, performance will increase. On the contrary, when users perform common tasks, the machine will automatically adjust to low performance. This mechanism saves battery life and successfully extends the life of the device. However, it still ensures users the best experience on the computer.

Picture 2 of What is Turbo Boost technology? Which machine is equipped with Turbo Boost?

## Factors affecting Intel Turbo Boost

There are 4 main factors affecting Intel Turbo Boost:

1. How many cores are active on the CPU?
2. Tasks and workloads that users need to perform at the same time.
3. The power consumption of the power supply is low or high.
4. Is the temperature from the processor high or low and is the heatsink working effectively?

## Compare Turbo Boost 2.0 vs Intel 3.0

**Turbo Boost 2.0** technology is equipped on almost every CPU (except Core i3) of Intel Core i5, 7, 9 and Intel Xeon processors. Meanwhile, **Turbo Boost 3.0** technology has been repaired and upgraded from version 2.0. Therefore, they meet higher performance and better clock speeds. Compared to its predecessor, Turbo Boost 3.0 can adjust the clock speed 15% better.

At present, Turbo Boost 3.0 technology is equipped on many Intel X series processors. For example, Core i7-69xx/68xx CPU, Xeon Processor CPU, Core i9-9820X/i9-99x0XE/i9- 99x0X,...

## Do I need to download and activate Intel Turbo Boost technology?

Turbo Boost technology is built into CPUs so it will automatically configure and operate on the computer. Therefore, users absolutely do not need to download or activate.

However, you can still proactively stop using this technology when necessary. Specifically, you access the BIOS to stop the Turbo Boost program if you want to fix performance-related problems or determine the impact of Turbo Boost technology on your computer.

Picture 3 of What is Turbo Boost technology? Which machine is equipped with Turbo Boost?

## How to install Turbo Boost

As mentioned above, Turbo Boost technology is always built into the CPU. Therefore, you will not need to find or perform installation and activation activities for this technology. The computer's performance will be automatically optimized according to the user's requirements.

However, you can also actively manage and monitor the operating status of this technology through third-party software. The most prominent among them is the Intel Turbo Boost Technology Monitor software developed by Intel itself and announced.

## Which computer lines are equipped with Turbo Boost technology?

At present, the vast majority of computers with Intel core i5 and core i7 CPUs have built-in Turbo Boost technology. For Core i3 models, Turbo Boost technology has not been applied. Instead, manufacturers have used

Hyper Threading technology.

Hyper Threading is understood as a technology that provides two threads at each core simultaneously. This helps double the number of tasks the computer can handle, thereby fulfilling user requirements. Thanks to that, data as well as the processing speed of the machine take place faster and smoother.

## Epilogue

Above is a summary of basic information about Turbo Boost technology that TipsMake wants to share with you. This advanced technology from manufacturer Intel will bring you the best experience on your computer.

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