

## Increasing a Computer Performance by Overclocking Central Processing Unit (CPU)

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**Abstract :** The objective of this study is to investigate the increasing desktop computer performance after overclocking central processing unit or CPU by running a computer component at a higher clock rate (more clock cycles per second) than it was designed at the rate of 0.1 GHz for each level or 100 MHz starting at 4000 GHz-4500 GHz. The computer performance is tested for each level with 4 programs, i.e. Hyper PI ver. 0.99b, Cinebench R15, LinX ver.0.6.4 and WinRAR . After the CPU overclock, the computer performance increased. When overclocking CPU at 29% the computer performance tested by Hyper PI ver. 0.99b increased by 10.03% and when tested by Cinebench R15 the performance increased by 20.05% and when tested by LinX Program the performance increased by 16.61%. However, the performance increased only 8.14% when tested with Winrar program. The computer performance did not increase according to the overclock rate because the computer consists of many components such as Random Access Memory or RAM, Hard disk Drive, Motherboard and Display Card, etc.

**Keywords :** overclock, performance, central processing unit, computer

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