

FAQ No. 01870

[Guide] CPU Overclocking

Affected Model: MSI Gaming series notebook with Intel Core i7-6820HK Processor

Q: How to set CPU overclocking on my notebook?

A: This guide will show you how to overclock CPU through Dragon Gaming Center, please refer to the steps below.

- Please make sure that there is an Intel Core i7-6820HK Processor in your notebook and the version of Dragon Gaming Center is v2.0.1510.2701 or later. (You could download and update Dragon Gaming Center from MSI product page)
- II. Perform [Dragon Gaming Center] and select [Device Setting]. Please read the warning message carefully and click on [OK] button.

🗑 MSI DRAGON GAMING CENTER 🛛 🗕		
System Monitor Utility Instant Play Device Setting	<section-header><section-header><section-header><section-header><text><text><list-item><list-item><list-item><list-item><text></text></list-item></list-item></list-item></list-item></text></text></section-header></section-header></section-header></section-header>	



III. Click on [Sport] mode and then select the [CPU Ratio] you want to overclock with Intel i7-6820HK Processor. (**37***x*, **38***x*, **39***x*, **40***x*, and **41***x*)

Shift Mode	Shift Mode	
Experience shift mode's multi-level performance.	Eventioned chiff models multi lovel performance	
1. Click on Sport mode	Experience shint mode's multi-level performance.	
Green Comfort Sport	Green Comfort Sport	
CPU Ratio 37x	2. Select CPU Ratio	
👼 CPU-Z — 🗆 X		
CPU Caches Mainhoard Memory SPD Craphice Rench About		
Processor	Experience shift mode's multi-level performance	
Name Intel Core i7		
Code Name Skylake Max TDP 45.0 W		
Package Inside" Technology 14 nm Core VID 1.201 V CORE 17	Green Comfort Sport	
Specification Intel(R) Core(TM) i7-6820HK CPU @ 2.70GHz		
Family 6 Model E Stepping 3	CPU Ratio 41x	
Ext. Family 6 Ext. Model 5E Revision R0		
Instructions MMX, SSE, SSE2, SSE3, SSSE3, SSSE4, 1, SSE4, 2, EM641, V1-X, AES, AVX, AVX2, FMA3, TSX		
Clocks (Core #0)		
Core Speed 4090.00 MHz L1 Data 4 x 32 KBytes 8-Way		
Multiplier x 41.0 (8 - 36) L1 Inst. 4 x 32 KBytes 8-way		
Dar Speed 20.70111 Level 2 4 x 256 KBytes 4-way Rated F58 Level 3 8 MBytes 16-way	You can use CPU-Z to observe [Core Speed]	
	increase.	
Selection Processor #1 v Cores 4 Threads 8		
CPU-Z Ver. 1.73.0.x64 Tools Validate Close		

Please switch to [Comfort] mode if you don't want to perform CPU overclocking, the CPU and GPU would run at default setting - Intel i7-6820HK CPU @ 3.6 GHz. (Max CPU Ratio with Intel Turbo Boost enabled)

 Please read the warning message carefully when overclocking: Altering clock frequency and/or voltage may

- Reduce system stability and useful life of the system and processor;
- Cause the processor and other system components to fail;
- Cause reductions in system performance;
- Cause additional heat or other damage;
- Affect system data integrity.