

# Intel released the 10th generation H series CPUs for laptops, promising outstanding performance

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As planned, Intel has officially announced the 10th-generation mobile Core processor 'Comet Lake H-Series' for laptops, with the goal of pushing the maximum clock speed on laptops beyond the mark. 5GHz without overclocking design or any additional interference. In other words, the market for high-end laptops in the near future is about to witness the launch of the monster 'monster' with promising performance not inferior to the desktop.

Comet Lake H-Series is currently Intel's most powerful line of processors for laptops, designed to appear on high-end gaming laptops or innovative machines for users with high demand. performance, but still portray mobility. Especially in the gaming segment, Intel is working with laptop manufacturers to create a new design with a high-frequency display and DisplayHDR 1000 standard. In addition to optimizing the heat dissipation on the device. , help improve CPU power.

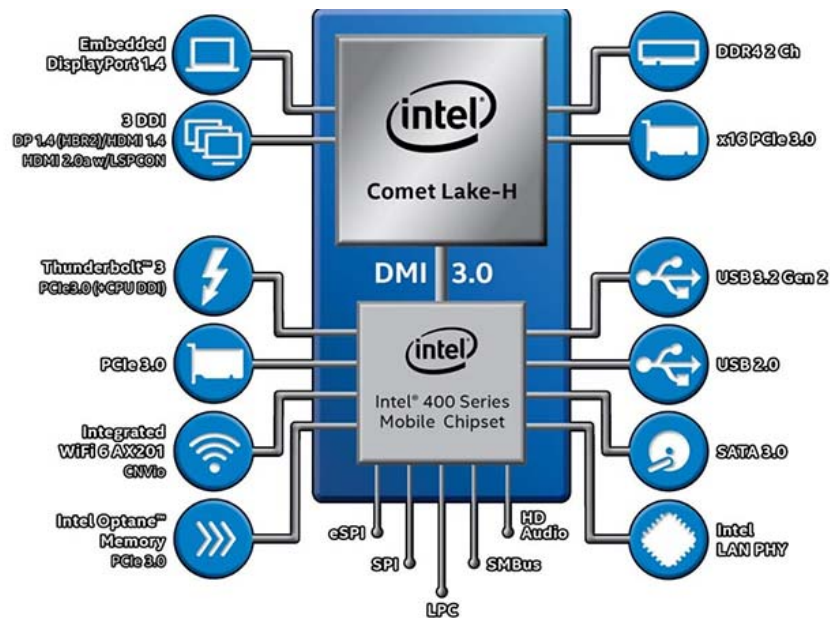
NEW 10<sup>TH</sup> GEN INTEL® CORE™ MOBILE PROCESSORS COMPARISONS\*

	10 <sup>TH</sup> GEN INTEL® CORE™ i9 MOBILE PROCESSORS	10 <sup>TH</sup> GEN INTEL® CORE™ i7 MOBILE PROCESSORS	10 <sup>TH</sup> GEN INTEL® CORE™ i5 MOBILE PROCESSORS
Maximum Processor Frequency (GHz)	Up to 5.3	Up to 5.1	Up to 4.6
Number of Processor Cores/Threads	8/16	6/12 to 8/16	4/8
Intel® Turbo Boost Technology 2.0	Yes	Yes	Yes
Intel® Turbo Boost Max Technology 3.0	Yes	Yes	No
Intel® Hyper-Threading Technology	Yes	Yes	Yes
Intel® Smart Cache Size (MB)	16	12-16	8
Memory Type support	DDR4-2933	DDR4-2933	DDR4-2933
Number of Memory Channels	2	2	2
Intel® UHD Graphics	Yes	Yes	Yes
Graphics Dynamic Frequency (MHZ)	Up to 1250	Up to 1200	Up to 1100
Intel® Quick Sync Video	Yes	Yes	Yes
CPU/Graphics/Memory Overclocking*	Yes	Partial (with i7-10850H)	No
Intel® Optane™ Memory Support	Yes	Yes	Yes
Intel® Virtualization Technology	Yes	Yes	Yes
Intel® Thermal Velocity Boost	Yes	Yes	No
Intel® AES-NI	Yes	Yes	Yes
Intel® TSX	Yes	Yes	Yes
Intel® AVX2 <sup>1</sup>	Yes	Yes	Yes
Intel® SGX	Yes	Yes	Yes
Intel® BIOS Guard	Yes	Yes	Yes
Intel® Boot Guard	Yes	Yes	Yes
Intel® OS Guard	Yes	Yes	Yes
Intel® Identity Protection Technology	Yes	Yes	Yes

In this series, the star of the stage is of course the most powerful Core i9-10980K chip with 8 cores, 16 threads and especially the clock speed can be pushed up to 5.3GHz on the cores. single. Just below are the two Core i7 processors, including the Core i7-10850H (6 cores 12 threads) and the Core i7-10875H (8 cores 16 threads) also have a maximum clock speed of up to 5.1GHz on single cores. .

Meanwhile, the Core i5 series (4 cores 8 threads), although has lower clock speed: 4.6GHz, but overall still very respectable. In addition, all support overclocking to achieve higher speeds through the Intel Speed ??Optimizer tool. Besides, Heat Velocity Boost on i7 and i9 increase by 200 MHz for your performance when CPU is under 65C.

All Comet Lake-H processors are developed based on 14nm process and have the same IPC level as Skylake.



Compared to the 9th-generation versions, at Comet Lake-H Intel wants to focus on more clock speeds as this is the factor that most significantly boosts gaming performance - the front Intel is suffering from stiff competition from AMD and showing signs of being overtaken by rivals.

At present, AMD CPU has lower clock speed (only at 4.4 GHz), but it was developed with 7nm process for better power consumption efficiency. In addition, the new AMD chips are also equipped with 8-core Radeon Vega graphics, providing performance that is superior to Intel's UHD. However, this is not so important because Intel's high-performance chips are often combined with discrete GPUs instead of integrated GPUs.

Intel also said it worked with laptop makers to provide a better experience for content creators, who often buy high-performance laptops with little interest in gaming.

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