Intel to unveil 10-core 5.3GHz processor
7 April 2020, by Peter Grad

Two comets are headed our way later this month: One is the celestial kind, C/2019 Y4, expected to provide a spectacular nighttime light show as it comes closest to Earth late in May.

The other is Intel's long anticipated 10th generation Comet Lake S processor, due to be formally announced April 30.

Leaked slides of the new series were obtained by the web site VideoCardz.

The top-of-the-line processor is the i9-10900K that will feature 10 cores and 20 threads. It will have a boost speed of up to 5.3 GHz, achieved with assistance from Intel's Thermal Velocity Boost technology. TVB kicks in when a CPU is sufficiently cooled and power is available for the boost.

The processor, which replaces the i9-9900K, is up to 30 percent faster than the old one and will compete with AMD's Ryzen lineup.

Intel says the processor will offer "elite real-world performance," claiming "high frame rates in your favorite games, even under extreme multi-tasking workloads." The i9-9900K should perform faster than AMD's Ryzen 3700X and somewhat slower than the R9 3900X, according to leaked specs.

Two other processors were named in the Intel leak: The i7-10700K boasting 8 cores, 16 threads and speeds up to 5.1GHz and the i5-10600K with 6 cores, 12 threads and top speed of 4.8GHz.

Prices for the i9, i7 and i5 are estimated at $550, $288 and $177 respectively.

This compares with AMD's lineup: the Ryzen 9 3900X currently sells for about $439, the Ryzen 7 3800X about $338 and the Ryzen 5 3600X at about $199.

Purchasers of the new Intel processor will also have to figure in the cost of a motherboard upgrade since the new lineup will require motherboards with LGA 1200 sockets. Advanced cooling systems will also be necessary to take full advantage of Boost technology, which is dormant if the system is too heated.

Competition between the two processor giants will ramp up when AMD's highly touted Ryzen 4000 processors hit the market later this year.

In a separate leak last week, plans for 10th generation Comet Lake-H series CPUs for laptops were revealed. These will be the first mobile chips to achieve speeds above 5GHz.

Later this fall, Intel is expected to launch its 11th generation processor lineup that will succeed the Comet Lake family. Comet Lake uses the 14 nm processor platform ushered in with Skylake in 2015.


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