

# Intel Coffee Lake

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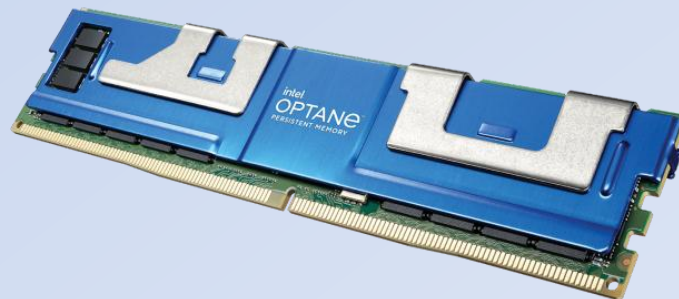
Coffee Lake features largely the same CPU core and performance per MHz as Skylake/Kaby Lake. Features specific to Coffee Lake include:

- Increased core count to six cores on Core i5 and 8th generation i7 parts; Core i3 is now a quad-core brand. 9th generation i7 and i9 parts feature eight cores.
- Increased L3 cache in accordance to the number of threads
- Increased turbo clock speeds across i5 and i7 CPUs models (increased by up to 400 MHz)
- Increased iGPU clock speeds by 50 MHz and rebranded it UHD (Ultra High Definition)
- DDR4 memory support updated for 2666 MHz (for i5, i7 and i9 parts) and 2400 MHz (for i3 parts); DDR3 memory is no longer supported on LGA1151 parts, unless using with H310C chipset
- 300 series chipset on the second revision of socket LGA 1151
- Support for CNVi

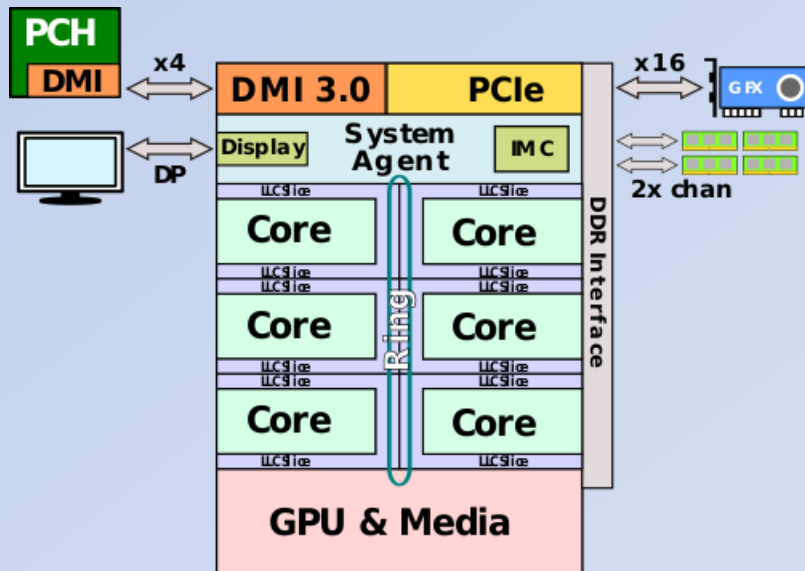


These processors mark the first time that Intel has released mainstream consumer CPUs that support up to 128GB RAM

- **Desktop processors (Coffee Lake S):**
  - Core i7 – i5 Up to 128 GB DDR4-2666
  - Core i3, Pentium Gold, Celeron Up to 64 GB DDR4-2400
- **Workstation processors (Coffee Lake S):**
  - Xeon E Up to 128 GB DDR4-2666
- **Mobile processors (Coffee Lake H & Coffee Lake U)**
  - Core i9 – i5 Up to 128 GB DDR4-2666
  - Core i3 Up to 64GB DDR4-2400, LPDDR3-2133



Coffee Lake is Intel's codename for its eighth generation Core microprocessor family. It is manufactured using Intel's second 14 nm process node refinement. It features increased transistor gate pitch for a lower current density and higher leakage transistors that allows higher peak power and higher frequency at the expense of die area and idle power.

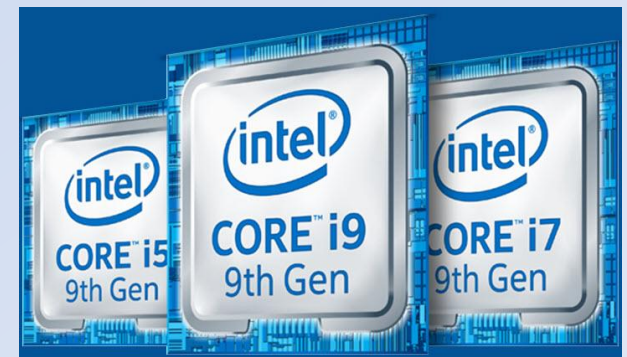
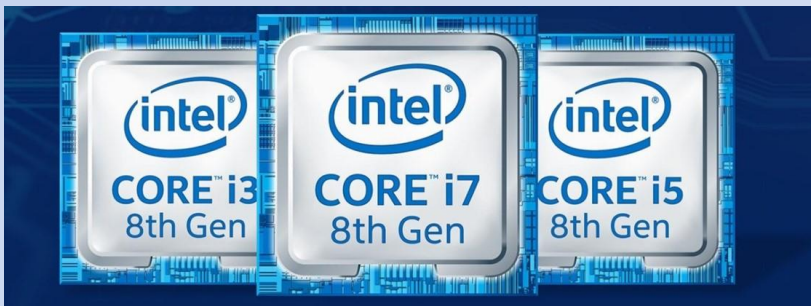


- **8TH GENERATION**

Coffee Lake marks a shift in the number of cores for Intel's mainstream desktop processors. In the 8th generation, mainstream desktop i7 CPUs feature six cores and 12 threads, i5 CPUs feature six single-threaded cores and i3 CPUs feature four single-threaded cores.

- **9TH GENERATION**

For the 9th generation, the Intel Core i9 made its debut on the mainstream desktop, describing CPUs with 8 cores and 16 threads. 9th generation i7s feature 8 single-threaded cores, although the 9th generation Core i7 mobile CPUs do support hyperthreading and have 6 cores just like 8th gen mobile chips. 9th generation i5 CPUs feature six single-threaded cores.



# What am I using?

I have a fairly old computer on LGA 775 (Socket J) with QuadCore Intel Xeon E5450 processor and 8GB RAM DDR3 1333Mhz. But even such an old processor copes well with everyday simple tasks.

