The Future of PC, According to Intel

Written by Alice Marshall
09 January 2019

The Intel CES 2019 keynote looks to the future, as Chipzilla reveals 2 processor families-- Ice Lake and Lakefield, both based on 10nm technology. Also announced is Project Athena, an "innovation program" for advanced laptops.

Ice Lake denotes the first Intel volume 10nm processor family. Based on Sunny Cove architecture, it features Intel DL Boost instruction sets to accelerate AI workloads and integrated gen 11 graphics with Adaptive Sync (FreeSync) support. The platform integrates Thunderbolt 3 and the Wifi 6 wireless standard, and promises improvements on the battery life front. The first products featuring Ice Lake processors will be of the laptop variety, and will be available in OEM partner devices by Q4 2019.

Meanwhile Lakefield is a 10nm client platform featuring a hybrid x86 CPU offering both Core and Atom architecture cores, making it an Intel first. Another first for Chipzilla is the use of "Foveros," a 3D active interposer technology putting all cores and graphics on a chip on an interposer. The interposer also carries all IO, and allows for much smaller chip designs.

At CES 2019 Intel says the first Lakefield chip consists of a high-performance Sunny Cove core plus four Atom-based "small CPUs," plus graphics, IO and memory. It also shows off a small motherboard based on the technology aimed at thin and light devices, and says the first Lakefield devices should debut later in 2019.

Intel mentions Project Athena-- a future laptop program one can describe as the next iteration of the Ultrabook concept. Aimed to last throughout the coming decade, it will have Intel and OEMs working together on upcoming notebooks and laptops, updating the specification on a yearly basis to leverage on next-gen technologies such as 5G and AI. The specification covers all kind of form factors, including touchscreens and hybrid designs, and the first products should reach

The Future of PC, According to Intel

Written by Alice Marshall
 09 January 2019

the market on H2 2019.

Finally Chipzilla has additions to the 9th gen Core desktop family. In total CES 2019 sees the launch of 6 more desktop CPUs, with 5 models featuring the "F" suffix (meaning a lack of integrated graphics) and a 6C/6T core i5-9400 including UHD 630 graphics. The desktop ships will be available later in January 2019, followed by 9th gen mobile processors in Q2.

Go [Intel at CES 2019](#)