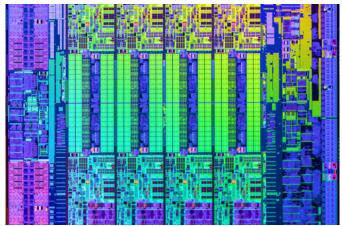
The Intel Moore's law-based chip release schedule cracks as the company delays the next generation "Cannonlake" processor launch-- the chips, fabricated using a 10nm process, will see release on H2 2017.



Moore's law dictates a two-year chip chip technology upgrade cycle.

Back at IDF 2013 Chipzilla announced a 2015 release for the 10nm Cannonlake. That date was later pushed back to 2016, before the most recent delay. How come? It turns out that really tiny architecture is really complex to build.

"On all of these technologies, each one has its own recipe of complexity and difficulty, and 14-nanometer to 10-nanometer [is the] same thing that happened from 22-nanometer to 14-nanometer," Intel CEO Brian Krzanich admits. "The lithography is continuing to get more difficult as you try and scale, and the number of multipattern steps you have to do is increasing."

Thus, in order to fill the 2016 release schedule gap left by the delay Chipzilla announces another chip series-- "Kaby Lake," a 14nm Skylake derivative.

The news comes just a week after IBM boasted the creation of the industry's first 7nm node test chips with functional transistors. The result of collaboration with Globalfoundries, Samsung and the SUNY Polytechnic Institute Colleges of Nanoscale Engineering Science and Engineering, the breakthrough features innovative technologies such as silicon germanium (SiGe) channel transistors and Extreme Ultraviolet (EUV) lithography integration at multiple levels.

Intel Delays 10nm Cannonlake

Written by Marco Attard 17 July 2015

That said such results remain strictly in the laboratory, and are still years away from eventual commercialisation.

The Cannonlake delay was announced at the Intel Q2 2015 earnings call-- one seeing the company beating analyst earnings estimates, even if it sees revenues dropping by -5% Y-o-Y to \$13.2 billion and net income reaching \$2.7bn, a -3% Y-o-Y drop.

"Q2 results demonstrate the transformation of our business as growth in data centre, memory and [Internet of Things] accounted for more than 70% of our operating profit and helped offset a challenging PC market," Krzanich remarks.

Go Intel Q2 2015 Earnings Call Transcript (Seeking Alpha)

Go Intel Q2 2015 Results

Go IBM Research Alliance Produces Industry's First 7nm Node Test Chips