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Samsung Ready With 5nm EUV

SAN JOSE, Calif. – Samsung announced it has completed work and is taking orders for a 5nm foundry process using extreme ultraviolet lithography. It will offer 25% greater density and either 10% more performance or 20% less power consumption than its 7nm node with EUV announced in October.

Samsung has taped out "many" 7nm chips as well as one device in a so-called 6nm node that lets users make custom changes to its 7nm process and IP blocks. It also announced plans to start production in 2020 on a second EUV foundry line it is now setting up next to its current S3 line in Hwaseong, Korea.

With the news, the Korean giant aims to steal some thunder from larger rival TSMC, which is scheduled to give an update on its work on a 5nm node next week. The two are racing to capture a lucrative but shrinking market for leading-edge process technology at a time when it's becoming more complex and costly to make chips smaller and faster.

Wave Computing Launches IP For AI

SANTA CLARA, Calif. – Startup Wave Computing added IP for deep learning to its expanding business model of chips, systems and services. Its TritonAI 64 packages existing MIPS and dataflow blocks with a new tensor core unit, initially targeting inference jobs at the edge.

Observers expressed surprise one of the first startups to design accelerators for deep learning would enter a market already well served by established IP players. Wave has yet to reveal specs, performance and availability of its new products, leaving analysts unable to make meaningful comparisons to existing blocks from Cadence, Ceva, Nvidia, Synopsys and others.

"It's a busy sector, but they have MIPS now so they have expertise in licensing," said Linley Gwennap of the Linley Group, referring to Wave's acquisition in June of the processor IP vendor.

Intel Axes 5G Smartphone Modem Plans After Apple And Qualcomm Reconcile

Chipmaker Intel conceded on Tuesday it would not release a 5G smartphone modem and was axing its plans to do so, just hours after rival Qualcomm made peace with Apple and set in motion a new era of co-operation between the companies.

Intel, which makes modem chips that go in smartphones, said it did not expect to launch a 5G phone chip, "including those originally planned for launches in 2020" — a reference to Apple's planned 5G iPhone release. Rumours have circulated for weeks that Intel had experienced delays and would not meet Apple's 2020 deadline, although it had until Tuesday said plans were on track.

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Wi-Fi 6 to be Trialed In UK Factory

A government-backed initiative in the U.K.'s Midlands region plans to sponsor a handful of trials using 5G cellular. For its part, the WBA aims to launch at least four trials around the world using Wi-Fi.

"We got involved with the U.K. government because the Midlands region started 5G trials," said Tiago Rodrigues, general manager of the WBA, in an interview with EE Times. "We shared our vision of using heterogeneous networks, and they agreed, so we talked about a trial under its 5G umbrella to try Wi-Fi 6. Mettis was considering 5G, but they were keen to look into Wi-Fi, too."

The efforts show the increasing competition between 5G and Wi-Fi in industrial IoT and other scenarios. Both networks see their enhanced throughput and latency enabling wireless connections to sensors that simplify maintenance and enhance robotics.