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Intel Rules Out Fab Investment in UK, Blaming Brexit

Intel has officially ruled out the UK as the site for its planned huge expansion of chip manufacturing capability in Europe, blaming the country's choice to leave the European Union (EU) for its decision. Pat Gelsinger, the American semiconductor giant's CEO told the BBC Thursday (Oct. 7, 2021) that "post Brexit, we are looking to the EU countries and getting support from the EU".

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Spin-Orbit-Torque Tackles MRAM Constraints

The next generation of embedded MRAM (magneto-resistive RAM) may boil down to changing the order of ingredients in the recipe.

Spin-orbit-torque (SOT) MRAM addresses the “trilemma” that Spin-transfer torque (STT) MRAM currently faces, said Antaios CEO Jean-Pierre Nozières in an interview with EE Times. The significant voltage across the device tunnel oxide that’s required for writing means there is a continual tradeoff between data retention, write endurance, and write speed. That means even though it’s reached near maturity, STT MRAM is still constrained when it comes to meeting the demands of high-speed RAM applications that require a combination of high speed and infinite endurance, along with acceptable data retention.

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Samsung Foundry recently held its Foundry Forum where it revealed some details of its semiconductor process roadmaps and fab expansion. Samsung is being most aggressive pursuing the next generation of transistor technology, with plans to reach mass production ahead of TSMC and Intel. Samsung’s 3-nanometer process will use the gate-all-around (GAA) transistor structure, which the foundry calls MBCFET (Multi-bridge channel FET) and will be in production first half of 2022. TSMC will wait another generation until its N2 process to deliver GAA some time in 2023.

Intel will bring its version of GAA, called RibbonFET, into production in its 20A process, likely in mid-2024. While Samsung is being the most aggressive on this technology, TSMC will deliver its 3-nanometer node earlier in 2022 using the more conservative approach by extending the life of FinFET designs.

‘Unicorn’ AI Chipmaker Hailo Raises \$136 Million

Israeli AI chip startup Hailo has raised \$136 million in a Series C funding round, bringing the company’s total to \$224 million. The company has also reportedly reached “unicorn” status.

With its Hailo-8 chip in production and shipping in volume, Hailo’s latest cash infusion will be used to continue building its software offering and support teams. The company has expanded its presence globally over the last year, opening offices in Tokyo, Taipei, Munich and Silicon Valley.

“We are building our sales force very intensively and our ability to support customers,” Hailo CEO Orr Danon told EE Times, adding that Hailo now has more than 100 customers. “We need to catch up in terms of the coverage we provide not only to customers, but the back office support team, the software team that support all the features customers are asking for.”

France Pledges €6b in Semiconductors

The French government unveiled Tuesday (Oct. 12) a €30 billion investment plan to create France’s future technological champions in sectors such as semiconductors, robotics, electric vehicles, nuclear and renewable energy sources.

Dubbed “France 2030”, the plan lists ten objectives for the country to revive its industrial economy and to position itself on breakthrough innovations. These ten objectives include the ambition to become a leader in green hydrogen, to develop small nuclear reactors in France, to decarbonize industry, to produce nearly 2 million hybrid and electric vehicles, and to take part in the “new space adventure”. All by 2030.

Intel Rules Out Fab Investment in UK, Blaming Brexit

Intel has officially ruled out the UK as the site for its planned huge expansion of chip manufacturing capability in Europe, blaming the country’s choice to leave the European Union (EU) for its decision.

Pat Gelsinger, the American semiconductor giant’s CEO told the BBC Thursday (Oct. 7, 2021) that “post Brexit, we are looking to the EU countries and getting support from the EU”.

The announcement is a huge blow to the UK’s manufacturing capability, coming just a day after Boris Johnson, the country’s Prime Minister, said he is targeting the UK to become a “science and technology superpower”.

Gelsinger revealed earlier this year that Intel was planning to invest €80 billion in building new fabs or expanding existing facilities over the next 10 years, as well as hugely increasing capacity in the US.