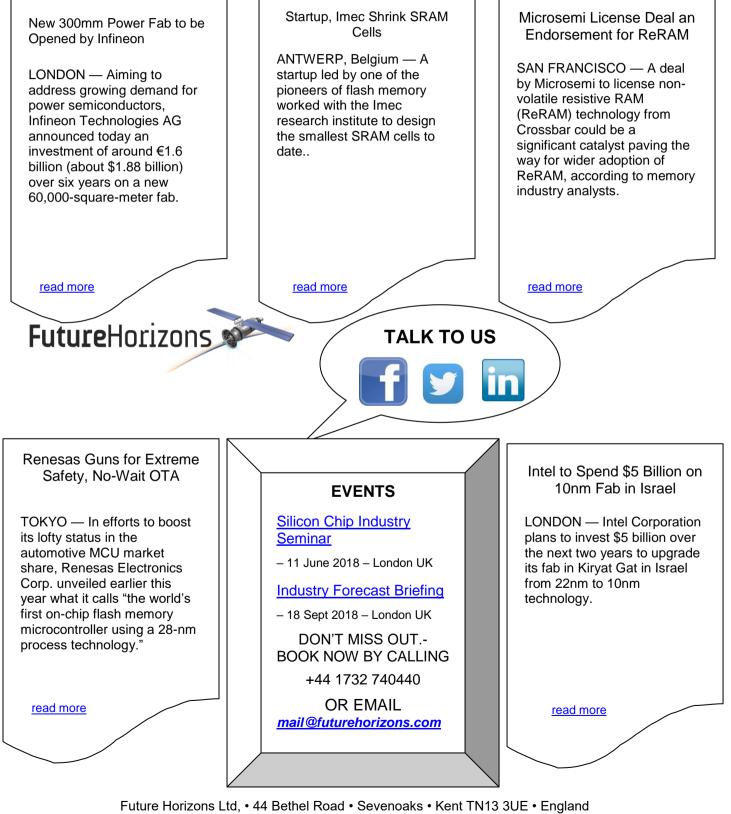
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New 300mm Power Fab To Be Opened By Infineon

LONDON — Aiming to address growing demand for power semiconductors, Infineon Technologies AG announced today an investment of around €1.6 billion (about \$1.88 billion) over six years on a new 60,000-square-meter fab.

The fully automated 300-mm fab will be located in Villach, Austria, alongside Infineon's existing production facility. It is expected to begin production in 2021.

Reinhard Ploss, Infineon's CEO, said through a statement that global megatrends such as climate change, demographic change and increasing digitization are driving an increase in demand for power semiconductors. "Electric vehicles, connected and battery-powered devices, data centers or power generation from renewable sources require efficient and reliable power semiconductors," Ploss said.

Startup, Imec Shrink SRAM Cells

ANTWERP, Belgium — A startup led by one of the pioneers of flash memory worked with the Imec research institute to design the smallest SRAM cells to date. The 0.0205-mm2 and 0.0184-mm2 6T-SRAM cells use a vertical gate-all-around transistor being developed by Unisantis as a building block for tomorrow's leading-edge chips.

The work was one of a handful of announcements at the opening day of the Imec Technology Forum. Other news here includes work on more accurate indoor location over Bluetooth, a dense lab-on-a-chip, and a camera-free approach to eye tracking, all developed solely by Imec

Microsemi License Deal An Endorsement For ReRAM

SAN FRANCISCO — A deal by Microsemi to license non-volatile resistive RAM (ReRAM) technology from Crossbar could be a significant catalyst paving the way for wider adoption of ReRAM, according to memory industry analysts.

"This is one of those things that kind of feeds off itself," said Jim Handy, principal at Objective Analysis. "It could cause a snowball effect for Crossbar."

Microsemi — which is in the process of being acquired by Microchip Technology — said earlier this week it agreed to license Crossbar's ReRAM intellectual property to integrate into next-generation products manufactured at the 1x nm process node.

Microsemi becomes the second chip firm to license Crossbar's ReRAM, joining Chinese foundry Semiconductor Manufacturing International Corp. (SMIC), which licensed ReRAM in 2016. The technology was put in production on 40nm at SMIC later in 2016.

Renesas Guns for Extreme Safety, No-Wait OTA

TOKYO — In efforts to boost its lofty status in the automotive MCU market share, Renesas Electronics Corp. unveiled earlier this year what it calls "the world's first on-chip flash memory microcontroller using a 28-nm process technology."

While tasking the company's own R-CAR SoCs to perform sensing and cognitive functions, Renesas is counting on its automotive MCU to further penetrate the growing market of connected, autonomous, and electric vehicles.

In the era of autonomous driving, the responsibility of safety MCUs is paramount. The MCU plays a crucial safety role in sensing, braking, and steering. Renesas's new MCU, dubbed the RH850/E2x series, comes loaded with safety functions, including six 400-MHz CPU cores. Four of them, individually, are paired with their own checker CPU cores and two additional CPU cores without checkers.

Intel to Spend \$5 Billion on 10nm Fab in Israel

LONDON — Intel Corporation plans to invest \$5 billion over the next two years to upgrade its fab in Kiryat Gat in Israel from 22nm to 10nm technology.

There was no official announcement from Intel, but Israel's ministry of finance said in a statement that approval is expected from Israel's government bodies in weeks and that the new plant will employ an additional 250 people. Intel had apparently considered several possible expansion sites but, after two years of discussion with Israel's finance ministry, decided to expand its site in the country.

Intel has been a major employer in Israel, starting with five employees in Haifa in 1974, and has invested about \$11 billion since then. Now the company employs 10,000 people in the country directly, with 60% of employees in research and development.