

FutureHorizons



The Global Semiconductor Industry Analysts

FH MONDAY

19 February 2018

STMicro Licenses LDMOS From Chinese Chip Startup

STMicroelectronics has licensed laterally diffused metal oxide semiconductor (LDMOS) RF power technology from Innogration Technologies, a Chinese semiconductor company specializing in the design and manufacturing of RF power semiconductor devices, modules, and sub-system assemblies.

[read more](#)

Arm Extends AI to the Masses

Arm's recently announced Project Trillium is likely to be quickly adopted by its partners and develop consistency between solutions that can be leveraged by the software community.

[read more](#)

Q'comm Preps Silicon as a Service

SAN JOSE, Calif. — Qualcomm is leaping from OEM silicon to end-user services with a kind of offering that one analyst sees as the start of a broad trend at the intersection of blockchain technology and the Internet of Things

[read more](#)

FutureHorizons



TALK TO US



Samsung Tops Intel with EUV SRAM

SAN FRANCISCO — Intel claimed that it maintained Moore's law scaling with a 10-nm SRAM that it described here at the International Solid-State Circuits Conference (ISSCC).

[read more](#)

EVENTS

[Silicon Chip Industry Seminar](#)

– March 2018 – London UK

[Industry Forecast Briefing](#)

– 16 January 2018 – London UK

**DON'T MISS OUT.-
BOOK NOW BY CALLING**

+44 1732 740440

OR EMAIL

mail@futurehorizons.com

STMicro, Macom to Begin Sampling GaN-on-Silicon

STMicroelectronics and Macom Technology Solutions announced an agreement that will improve Macom's access to manufacturing capacity for its gallium nitride-on-silicon technology and enable ST to manufacture its own products based on the technology for the RF energy and RF lighting markets.

[read more](#)

Future Horizons Ltd, • 44 Bethel Road • Sevenoaks • Kent TN13 3UE • England

Tel: +44 1732 740440 • Fax: +44 1732 740442

e-mail: mail@futurehorizons.com • <http://www.futurehorizons.com/>

Affiliates in Europe, India, Israel, Japan, Russian, San Jose California, USA

STMicro Licenses LDMOS From Chinese Chip Startup

LONDON — STMicroelectronics has licensed laterally diffused metal oxide semiconductor (LDMOS) RF power technology from Innogration Technologies, a Chinese semiconductor company specializing in the design and manufacturing of RF power semiconductor devices, modules, and sub-system assemblies.

Innogration is a start-up founded by Gordon Ma, who in the past worked with Freescale and Infineon and owns various patents on technology that ST wanted access to. Headquartered in Suzhou, China, Innogration claims to be the only commercial company doing vertical integration across multiple RF power semiconductor enablers, including core LDMOS and GaN in device and application areas with the addition of GaAs and VDMOS.

Arm Extends AI to the Masses

Arm's recently announced Project Trillium is likely to be quickly adopted by its partners and develop consistency between solutions that can be leveraged by the software community.

Tirias Research believes that by 2025, 95 percent of all new devices or platforms will leverage artificial intelligence in the cloud or with some form of native machine learning. Arm is not the first IP or semiconductor vendor to offer an AI solution, but as the center of the industry's largest processor architecture ecosystem, it may someday enable hundreds of billions of intelligent devices.

Today, cloud-based solutions are leveraging GPUs, FPGAs and custom chips for large deployments while most of the device-level solutions are using DSPs, dedicated IP blocks or custom accelerator chips. New solutions and companies are being announced almost weekly. Now Arm is stepping into the arena.

Q'comm Preps Silicon as a Service

SAN JOSE, Calif. — Qualcomm is leaping from OEM silicon to end-user services with a kind of offering that one analyst sees as the start of a broad trend at the intersection of blockchain technology and the Internet of Things. Qualcomm Wireless Edge Services combines security and management features that are already attracting interest from the likes of Alibaba and Baidu.

On a more traditional note, the cellular chip giant also announced its latest LTE modem. The X24 will hit max data rates of 2 Gbits/s, putting more space between itself and rivals such as Intel.

Qualcomm will use APIs and keys generated on three IoT chip sets as the basis for its Wireless Edge Services. They will establish secure links to Qualcomm-run servers that can manage a range of capabilities, potentially including every transaction between the node and the cloud. The links can also be used to unlock features of the silicon in what the company calls Chipsets as a Service.

Samsung Tops Intel with EUV SRAM

SAN FRANCISCO — Intel claimed that it maintained Moore's law scaling with a 10-nm SRAM that it described here at the International Solid-State Circuits Conference (ISSCC). However, Samsung followed by describing a smaller 256-Mbit SRAM made with extreme ultraviolet lithography and expressed confidence in EUV.

Intel described 0.0312-mm² high density and 0.0367-mm² low-voltage SRAM bitcells made in its 10-nm process. Samsung's 6T 256-Mbit device has a 0.026-mm² bitcell.

The Intel design shows 0.62–0.58x scaling compared to its 14-nm SRAM, maintaining Moore's law and "within 15 percent of the smallest reported 7-nm cell," said Intel's Zheng Gui, pointing to smaller 7-nm SRAMs from Samsung this year and TSMC at ISSCC 2017.

STMicro, Macom To Begin Sampling GaN-on-Silicon in 2018

LONDON — STMicroelectronics and Macom Technology Solutions announced an agreement that will improve Macom's access to manufacturing capacity for its gallium nitride-on-silicon technology and enable ST to manufacture its own products based on the technology for the RF energy and RF lighting markets.

The companies said they will develop GaN-on-silicon wafers to be manufactured by ST for Macom's use across an array of RF applications. While expanding Macom's source of supply, the agreement also grants to ST the right to manufacture and sell its own GaN-on-silicon products in RF markets outside of mobile phone, wireless basestation and related commercial telecom infrastructure applications — such as in RF energy for automotive and for RF lighting.

In addition to the access to increased wafer manufacturing capacity, Macom (Lowell, Mass.) said it expects to achieve an improved cost structure that could displace incumbent silicon LDMOS and accelerate the adoption of GaN-on-silicon in mainstream markets.