

FutureHorizons



The Global Semiconductor Industry Analysts

FH MONDAY

25 March 2019

Samsung Claims First 512GB Embedded UFS

SAN FRANCISCO — Samsung Electronics said it has begun mass production of the first 512GB embedded Universal Flash Storage (eUFS) device.

[read more](#)

NVM ReRAM Memory Cell Targets Edge AI

Researchers at CEA-Leti and Stanford University have demonstrated a chip that integrates multiple-bit non-volatile memory (NVM) resistive RAM (ReRAM) with silicon computing units and new memory resiliency features that provide 2.3x the capacity of existing ReRAM. Target applications include energy-efficient, smart-sensor nodes to support artificial intelligence

[read more](#)

Touchless Control Next for Smartphones

There's a race on to market the first devices with touchless / gesture control. LG led the pack at MWC, and Google and Apple appear very close on its heels. Those two could possibly introduce products featuring this kind of human-machine interface (HMI) before 2019 is out.

[read more](#)

FutureHorizons



TALK TO US



Lidar Startup Uses Metamaterials to Steer Beams

MADISON, Wis. – Lumotive, a Seattle-based, venture-backed startup, is unveiling Wednesday a lidar technology based on metamaterials, a relatively new and exotic technological approach that few if any of its competitors have adopted.

[read more](#)

EVENTS

[Silicon Chip Industry Seminar](#)

25 March 2019 – London UK

[Industry Forecast Briefing](#)

– 17 Sept 2019 – London UK

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

+44 1732 740440

OR EMAIL

mail@futurehorizons.com

Nvidia Mum on 7-nm GPU

SAN JOSE, Calif. — Nvidia's annual graphics event attracted some 8,000 attendees here, but one expected guest couldn't make it — a 7-nm GPU.

A nearly three-hour keynote featured new systems and software for the company's latest processors, announced last August.

[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

Samsung Claims First 512GB Embedded UFS

SAN FRANCISCO — Samsung Electronics said it has begun mass production of the first 512GB embedded Universal Flash Storage (eUFS) device.

The device is compliant with version 3.0 of the Universal Flash Storage from the JEDEC standards organization and delivers twice the speed of the previous-generation eUFS 2.1 spec to allow smartphone users to enjoy seamless experiences in future smartphones with ultra-large high-resolution screens, Samsung (Seoul) said.

The eUFS 3.0 matches the performance of today's ultra-slim notebooks, according to the company.

NVM ReRAM Memory Cell Targets Edge AI

LONDON — Researchers at CEA-Leti and Stanford University have demonstrated a chip that integrates multiple-bit non-volatile memory (NVM) resistive RAM (ReRAM) with silicon computing units and new memory resiliency features that provide 2.3x the capacity of existing ReRAM. Target applications include energy-efficient, smart-sensor nodes to support artificial intelligence on the internet of things or edge AI.

The proof-of-concept chip has been validated for a wide variety of applications (machine learning, control, security). Designed by a Stanford team led by professors Subhasish Mitra and H.-S. Philip Wong and realized in CEA-Leti's cleanroom in Grenoble, France, the chip monolithically integrates two heterogeneous technologies: 18 kilobytes (KB) of on-chip RRAM on top of commercial 130-nm silicon CMOS with a 16-bit general-purpose microcontroller core with 8 KB of SRAM.

Touchless Control Next For Smartphones

There's a race on to market the first devices with touchless / gesture control. LG led the pack at MWC, and Google and Apple appear very close on its heels. Those two could possibly introduce products featuring this kind of human-machine interface (HMI) before 2019 is out.

The two latest trends in HMI technologies are voice activation and touchless or gesture control. Voice-controlled products received a lot of attention at Embedded World in Nuremberg; a prominent example was NXP Semiconductor's new microcontroller featuring integrated Alexa Voice Service (AVS) capability, touchless control went almost unnoticed at MWC Barcelona, but it is equally being pursued aggressively by key players.

Lidar Startup Uses Metamaterials To Steer Beams

MADISON, Wis. — Lumotive, a Seattle-based, venture-backed startup, is unveiling Wednesday a lidar technology based on metamaterials, a relatively new and exotic technological approach that few if any of its competitors have adopted.

Among the many sensors destined to go inside advanced driver assistance systems (ADAS) and autonomous vehicles (AV), lidars continue to be a hotbed of new technology. The flip side of this vibrant activity, however, is the hard reality that the lidar market remains embryonic and its technologies fragmented. With more than \$800 million pouring into lidar tech startups over the last few years, Alexis Debray, technology and market analyst at Yole Développement (Lyon, France), estimated, "There are 60 to 70 lidar companies that have popped up worldwide."

Nvidia Mum On 7-nm GPU

SAN JOSE, Calif. — Nvidia's annual graphics event attracted some 8,000 attendees here, but one expected guest couldn't make it — a 7-nm GPU.

A nearly three-hour keynote featured new systems and software for the company's latest processors, announced last August. Ironically, the most interesting news nuggets were Nvidia's cheapest board to date and a research project on optical interconnects.

"The length of the event was inversely proportional to the content," quipped one analyst.

The unspoken message for a pack of rivals aiming to build deep-learning accelerators was clear. Nvidia doesn't need to pre-announce a new and faster chip because it owns that software stack and channel today.