

# FutureHorizons



The Global Semiconductor Industry Analysts

## FH MONDAY

17 February 2020

### Servers and Microphones Shine in Dull Quarter for Infineon

Reporting its quarterly results this week, Infineon Technologies said silicon microphones and its server business were bright spots in a quarter that otherwise saw a sequential revenue decrease of 7% to €1.916 billion (US \$2.1 billion).

[read more](#)

### DDR5 Demand Driven by Data Centers

TORONTO — Micron Technology chose CES 2020 to unveil its DDR5 chip, which is ironic, since the latest iteration of DRAM will initially find the most demand from data center applications before popping up in client devices.

[read more](#)

### Hon Hai, Yulon to set up car joint venture

Taipei, Feb. 8 (CNA) Hon Hai Precision Industry, the world's largest contract electronics maker, has decided to team up with Yulon Motor Co., one of the largest car makers in Taiwan, to set up a joint venture for car development.

[read more](#)

FutureHorizons



### TALK TO US



### XMOS Develops AIoT 'crossover processor'

BRISTOL, UK — XMOS has adapted its Xcore processor core for machine learning, creating a crossover processor for AIoT applications. The Xcore.ai will be available in volume for under \$1.

[read more](#)

### EVENTS

#### [Silicon Chip Industry Seminar](#)

—16 March 2020 London UK  
[Industry Forecast Briefing](#)

– 15 Sept 2020 – London UK

DON'T MISS OUT.-  
BOOK NOW BY  
CALLING

+44 1732 740440

OR EMAIL

[mail@futurehorizons.com](mailto:mail@futurehorizons.com)

### Arm Dives Into TinyML With New Cores

Arm has unveiled two new IP cores designed to power machine learning in endpoint devices, IoT devices and other low-power, cost-sensitive applications.

[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](mailto:mail@futurehorizons.com) • <http://www.futurehorizons.com/>

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

## **Servers And Microphones Shine In Dull Quarter For Infineon**

Reporting its quarterly results this week, Infineon Technologies said silicon microphones and its server business were bright spots in a quarter that otherwise saw a sequential revenue decrease of 7% to €1.916 billion (US \$2.1 billion). It also expects to close the Cypress acquisition transaction at the end of this quarter or the beginning of the next.

Reinhard Ploss, CEO of Infineon, said, "Demand for the latest generation of our silicon microphones is growing dynamically. We are also seeing signs of improvement in individual areas such as the server business. Overall, however, we do not expect to see a broad-based recovery of demand before the second half of the fiscal year. Our long-term growth drivers remain intact and we are making a crucial contribution to shaping the future of mobility and energy efficiency."

## **DDR5 Demand Driven By Data Centers**

TORONTO — Micron Technology chose CES 2020 to unveil its DDR5 chip, which is ironic, since the latest iteration of DRAM will initially find the most demand from data center applications before popping up in client devices.

In amongst giant wall-mounted LEDs, smartphones, and "impossible pork," Micron announced it had begun sampling its DDR5 Registered DIMMs based on its industry-leading 12nm process technology. Director of data center marketing Ryan Baxter told EE Times in a recent telephone interview that because DDR5 doubles memory density, it will feed the need in data centers for growing processor core counts with increased memory bandwidth and capacity. However, it will be nine months to a year before sampling will begin in large quantities to a wide variety of customers, he said.

## **Hon Hai, Yulon To Set Up Car Joint Venture**

Taipei, Feb. 8 (CNA) Hon Hai Precision Industry, the world's largest contract electronics maker, has decided to team up with Yulon Motor Co., one of the largest car makers in Taiwan, to set up a joint venture for car development.

Hon Hai, known as Foxconn in the global market, said Friday that it has signed an agreement with Yulon for the establishment of the vehicle development joint venture with a capital size of NT\$15.58 billion (US\$517 million).

According to Hon Hai, the new company will focus on car design and launch an open platform for car development.

For the development of the open platform, Hon Hai said the joint venture will involve a Yulon subsidiary, Hua-Chuang Automobile Information Technical Center Co. (HAITEC), and take advantage of Foxconn's electronics and information device design and manufacturing expertise to strengthen its car development.

## **XMOS Develops A lot 'Crossover Processor'**

BRISTOL, UK — XMOS has adapted its Xcore processor core for machine learning, creating a crossover processor for AIoT applications. The Xcore.ai will be available in volume for under \$1.

Xcore.ai, the third generation of products built on the company's proprietary core design, is designed for real-time AI inference and decision-making in endpoint devices, and can also handle signal processing, control and communications functions.

New to this third-generation chip is a vector pipeline capability for machine learning applications. It is the only crossover processor of its type to support binarized (1-bit) neural networks, which are growing in importance for ultra-low power AI in the endpoint applications as they offer order-of-magnitude improvement in performance and memory density traded for a modest reduction in accuracy (the Xcore.ai also supports 32-bit, 16-bit and 8-bit numbers).

## **Arm Dives Into TinyML With New Cores**

Arm has unveiled two new IP cores designed to power machine learning in endpoint devices, IoT devices and other low-power, cost-sensitive applications. The Cortex-M55 microcontroller core is the first to use Arm's Helium vector processing technology, while the Ethos-U55 machine learning accelerator is a micro-version of the company's existing Ethos NPU (neural processing unit) family. The two cores are designed to be used together, though they can also be used separately.

Enabling AI and machine learning applications on microcontrollers and other cost-sensitive, low-power resource-constrained devices is known as the tinyML sector. With the rise of 5G initiating a trend for more intelligence in endpoint devices, tinyML is expected to grow exponentially into a market that encompasses billions of consumer and industrial systems.