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The Global Semiconductor Industry Analysts

## FH MONDAY

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### Toshiba Memory to Acquire Lite-On's SSD Business

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### Breakthrough Flexible Actuator Technology

Creating a new category of flexible electronics, Senseg has unveiled the industry's first family of flexible actuators, manufactured on newly developed roll-to-roll manufacturing technology, delivering advantages in scalability, size, weight, and cost.

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### Details of Hailo AI Edge Accelerator Emerge

Secretive Israeli AI accelerator startup Hailo has revealed some key details of its novel compute architecture, following the launch of its first chip, the Hailo-8, in May. The company was founded in February 2017 by members of the Israel Defense Forces' elite intelligence unit.

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### TALK TO US



### Microchip Tackles CPU/Memory Bottleneck

TORONTO — Microchip chose to enter the memory infrastructure market at the Flash Memory Summit with the introduction its SMC 1000, a serial memory controller designed to alleviate the bottleneck between the CPU and memory.

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### EVENTS

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-11 Nov 2019- London UK

#### [Industry Forecast Briefing](#)

- 17 Sept 2019 - London UK

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### Senseg unveils breakthrough flexible actuator technology

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## **Toshiba Memory to Acquire Lite-On's SSD Business**

Following speculation in early August, Lite-On Technology has now confirmed it is selling its solid state drives (SSD) business to Toshiba Memory Holdings Corp. (soon to become Kioxia Corp.) for US\$165 million. Lite-On said the sale will allow it to focus on its core businesses including transformation towards cloud computing, LED lighting, automotive electronics and industrial automation.

The transaction, expected to be a purchase of shares in an all-cash deal and completed by April 2020 (subject to relevant approvals), involves the transfer of Lite-On SSD's business operations and assets, including inventories, equipment, personnel, intellectual properties, technologies and client and supplier relationships.

## **Breakthrough Flexible Actuator Technology Unveiled**

Creating a new category of flexible electronics, Senseg has unveiled the industry's first family of flexible actuators, manufactured on newly developed roll-to-roll manufacturing technology, delivering advantages in scalability, size, weight, and cost. The new Senseg elastomeric film actuator, or ELFIAC, can be used as a replacement for traditional actuators, including piezoelectric devices. It also opens up new opportunities for haptic technologies in applications, such as wearables, soft robotics, and virtual reality/augmented reality (VR/AR) devices.

The flexible actuator is composed of insulated electrode films separated by silicone elastomer spacers, or pillars. The silicon micro pillars work like springs. An electrostatic force compresses the layers and provides the actuation. The key enablers are the mechanical properties of the liquid silicon rubber used in the elastomer pillars, micromachining technologies, other new manufacturing methods which enable scaling to very large sizes, and a new high-voltage driver

## **Details of Hailo AI Edge Accelerator Emerge**

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The company was founded in February 2017 by members of the Israel Defense Forces' elite intelligence unit. Today, Hailo has around 60 employees at its HQ in Tel-Aviv.

Hailo has managed to get from concept to product in less than two years, having raised \$21 million to date in Series A funding. They have "at least ten" patents pending.

## **Microchip Tackles CPU/Memory Bottleneck**

TORONTO — Microchip chose to enter the memory infrastructure market at the Flash Memory Summit with the introduction its SMC 1000, a serial memory controller designed to alleviate the bottleneck between the CPU and memory.

Microchip's SMC 1000 8x25G enables CPUs and other compute-centric SoCs to use four times the memory channels of parallel attached DDR4 DRAM within the same package footprint, according to product marketing manager Jay Bennett in a telephone interview with EE Times. From a CPU point of view, the number of embedded cores has been steadily increasing, but the memory bandwidth capability of that CPU has not been keeping pace. "Individual cores within the CPU are each individually experiencing a decrease in aggregate bandwidth and also an aggregate increase in the latency for each of their individual transactions," he said.

## **Senseg Unveils Breakthrough Flexible Actuator Technology**

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