

# FutureHorizons



The Global Semiconductor Industry Analysts

## FH MONDAY

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### Broadcom Bid \$10.7 Billion for Symantec

Even Donald Trump can't stop Hock Tan from buying and cutting up big companies. After a conflict with the U.S. President over Qualcomm, Broadcom bid \$10.7 billion in cash for Symantec, its third acquisition in an effort to grow a franchise in business software.

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### A Step Closer to Optical Quantum Computers

While we often hear about the limitations of pushing the boundaries of semiconductor manufacturing process technologies to meet the needs of higher and higher levels of computing performance, optical circuits are evolving as one potential way of addressing the challenge.

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### Mixed Reviews for Intel's 10nm Chip

Early reviews of Intel's first processors made in its much-delayed 10nm node were mixed. A handful of reviewers praised their integrated graphics but said CPU improvements were modest at best.

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### TALK TO US



### CEVA Invests in Image Processing IP

Processor IP licensor CEVA has invested \$10 million in Immervision, a Canada-based startup that develops hardware and software for wide-angle lens camera systems. Combining Immervision's Data-In-Picture technology with sensor fusion capabilities from Hillcrest Labs, which CEVA acquired last month, could enable creation of AI-ready wide-angle footage with contextual metadata embedded in each video frame.

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### EVENTS

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

10 June - 2019 – London UK

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

– 17 Sept 2019 – London UK

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### Flexible Design Pursues PDK, Power

SAN JOSE, Calif. — Flexible hybrid electronics face big hurdles, but the technology is making progress toward big opportunities, experts said at an annual NextFlex gathering here. Two battery startups showed promising work.

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## **Broadcom Bid \$10.7 Billion For Symantec**

Even Donald Trump can't stop Hock Tan from buying and cutting up big companies. After a conflict with the U.S. President over Qualcomm, Broadcom bid \$10.7 billion in cash for Symantec, its third acquisition in an effort to grow a franchise in business software.

The deal has all the hallmarks of Tan's past acquisitions. A mature but troubled company is acquired. Its sales force, expenses and R&D budgets are significantly cut to focus on a few core products sold often at lower prices to undercut rivals.

The formula worked with the 2013 acquisition of LSI and the 2015 merger of Avago and Broadcom. After Trump prevented Tan from buying Qualcomm, the Broadcom chief executive shifted his strategy. Now Broadcom aims to expand its market from only selling chips to OEMs to also selling critical software to a larger base of end users.

## **A Step Closer To Optical Quantum Computers**

While we often hear about the limitations of pushing the boundaries of semiconductor manufacturing process technologies to meet the needs of higher and higher levels of computing performance, optical circuits are evolving as one potential way of addressing the challenge.

Announcements from two research groups on this subject caught my eye, one led by the Technical University of Munich whose work could pave the way for quantum sensors and transistors, and another from Stanford University whose work on photon diodes could influence the development of neuromorphic computing using light-based components.

## **Mixed Reviews For Intel's 10nm Chip**

Early reviews of Intel's first processors made in its much-delayed 10nm node were mixed. A handful of reviewers praised their integrated graphics but said CPU improvements were modest at best.

The 11 members of the notebook IC family, code-named Ice Lake, pack Wi-Fi 6 and Thunderbolt 3 support along with up to 64 GPU execution engines, more than twice the number on current chips. They will run at 9-28W compared to about 35W for today's 14nm parts.

Intel said the CPU in the chips will deliver an 18% improvement in instructions per clock. However, the chips generally run at lower clock frequencies than Intel's current 14nm notebook chips.

## **CEVA Invests In Image Processing IP**

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In an exclusive interview with EETimes, CEVA's VP market intelligence, investor and public relations Richard Kingston explained that CEVA's \$10 million investment in Immervision will allow the company to continue to develop its optical hardware and software.

## **Flexible Design Pursues PDK, Power**

SAN JOSE, Calif. — Flexible hybrid electronics face big hurdles, but the technology is making progress toward big opportunities, experts said at an annual NextFlex gathering here. Two battery startups showed promising work.

A mix of printed and traditional chips and traces on plastic substrates are enabling devices that bend and stretch and can be made cheaply and fast. But the processes for making such devices are still immature.

At an annual open house here, members of the NextFlex initiative shared their concerns and showed advances. The group was formed in September 2015 with about \$165 million in public and private financing.