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The Global Semiconductor Industry Analysts

FH MONDAY

29 August 2016

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TALK TO US



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ARM Reaches For Supercomputers

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The effort catapults the ARM processor core for the first time into the realm of supercomputers, a rarified territory Intel's x86 has come to dominate. ARM hopes it can expand its presence there the way Intel did, slowly replacing homegrown processors from the likes of IBM and Cray.

ARM's strength is in its potential for relative power efficiency compared to the x86. The trait could serve supercomputer designers who can't practically deliver the massive power to drive the exascale-class systems they want to build.

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Broad component supplier Würth Elektronik eiSos GmbH & Co. KG has acquired fellow German company Amber Wireless GmbH for an undisclosed sum.

Amber, founded in 1998, specialises in the design and manufacture of short-range RF modules for implementation of cable-free data links as well as home automation and automatic meter reading solutions. Through the acquisition, Würth Elektronik eiSos expands its range in growth fields, such as Internet of Things, Industry 4.0 and Smart Metering.

Amber offers wireless products in the 169MHz, 433MHz, 868MHz, 915MHz and 2.4GHz frequency bands suitable for sensor networks, Internet of Things, telemetry, logistics, asset tracking, smart metering, medical technology, security systems, as well as smart home, industry and building automation.

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The HoloLens processing unit (HPU) fuses input from five cameras, a depth sensor and motion sensor, compacting and sending it to the Intel SoC. It also recognizes gestures and maps environments including multiple rooms.

Microsoft described the guts of HoloLens earlier this year, but has not until now publicly detailed its HPU. The company evaluated merchant computer-vision chips including those from Movidius but found none that handled all its algorithms at its performance, latency and power targets.

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IBM's Power 9 processor, described for the first time at Hot Chips yesterday, could become a break out chip, seeding new OEM and accelerator partners and rejuvenating Big Blue's bid against archrival Intel in high-end servers.

The 14nm Power 9, first mentioned in March, takes a bold if somewhat fragmented strategy in the hot area of accelerators. It is IBM's first Power chip to emerge as a family to enable a range of scale up and scale out system designs.

Like past IBM microprocessors, to reach new performance levels it uses a gob of memory—including a whopping 120 Mbyte embedded DRAM in shared L3 cache riding a 7 Tbit/second on-chip fabric.

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Rohm, a Japanese component maker whose business could be harmed by the steady decline in market share among the leaders of Japan's consumer electronics industry — namely, Sony, Panasonic and Sharp — has good reason to sweat its own prospects.

"We worry our business, too, could start declining," Katsumi Azuma, Rohm's director of discrete & module production, told us during a recent interview with EE Times, held at the company's headquarters in Kyoto.

After all, it's not just Rohm who might suffer. A ripple effect threatens suppliers of chips, parts and components, who have grown by riding the coattails of Japan's once-dominant consumer system companies in segments like home entertainment, mobile devices and white goods.