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DDR Alternative Debuted by IBM

PALO ALTO, Calif. – IBM defined at Hot Chips a new interface for the 2020 version of its Power 9 CPUs. The Open Memory Interface (OMI) will enable packing on a server more main memory at higher bandwidth than DDR, and as a potential Jedec standard could rival GenZ and Intel's CLX.

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Cerebras Spins Whole Wafer for AI

Startup Cerebras will describe at Hot Chips the world's largest semiconductor device, a 16nm wafer-sized processor array that aims to unseat Nvidia's GPUs dominance in training neural networks. The whopping 46,225mm² die consumes 15kW, packs 400,000 cores, and is running in a handful of systems with at least one unnamed customer.

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More 5G Handsets Hit the Chinese Market

The third quarter has always been the traditional peak season for consumer electronics in China. After half a year of market downturn, major mobile phone manufacturers are looking forward to using 5G communication products to reactivate consumer enthusiasm.

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TALK TO US



Autonomous Robots Put to Work

Robots aren't exactly taking over the world, but autonomous vehicles, radio-controlled cars, and robots are becoming a common sight at many workspaces. From military and industry to energy and emergency services, robots are becoming part of the regular crew – and it's for good reason

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Is a \$140 Smart Water Bottle for Kids Worth the Price?

Smart water bottles are designed to entice children to drink more water, but they aren't all that smart, and the high price tag due to problems in the supply chain are limiting consumer adoption.

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DDR Alternative Debuted By IBM

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OMI basically removes the memory controller from the host, relying instead on a controller on a relatively small DIMM card. Microchip's Microsemi division already has a DDR controller running on cards in IBM's labs. The approach promises to deliver up to 4TBytes memory on a server at about 320GBytes/second or 512GB at up to 650GB/s sustained rates. Its cost is in the Microchip controller that adds at least 4-nanosceonds latency and dissipates about 4W, about half of which is mitigated by removing a DDR PHY from the host.

Cerebras Spins Whole Wafer for AI

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Also, at this week's event Huawei, Intel and startup Habana will detail their chips for training neural networks. They all aim to attack Nvidia which last year sold about \$3 billion in GPUs for the performance-hungry application.

More 5G Handsets Hit The Chinese Market

The third quarter has always been the traditional peak season for consumer electronics in China. After half a year of market downturn, major mobile phone manufacturers are looking forward to using 5G communication products to reactivate consumer enthusiasm. First-tier manufacturers including Huawei and Samsung Electronics will release 5G new mobile phones in August, and the entire consumer electronics industry chain is expected to enter the peak of stocking.

At the same time, influenced by external factors, the concept of China's smartphone industry chain's self-controllability has gradually advanced. With the recent launch of Huawei's operating system, the consumer electronics industry chain is expected to continue to become the focus of the market in the third quarter.

Autonomous Robots Put To Work

Robots aren't exactly taking over the world, but autonomous vehicles, radio-controlled cars, and robots are becoming a common sight at many workspaces. From military and industry to energy and emergency services, robots are becoming part of the regular crew – and it's for good reason. Here are the top five robot workers, where you'll see them, and why.

Why robots

Technology for autonomous vehicles has increased significantly over the past decade. The robots of today are equipped with sensors that can do everything from identifying motion and excessive moisture, to notifying operators in the event of abnormal temperature fluctuations and vibration levels.

In this way, robots can help signal if what they are inspecting is about to break down, allowing crews to come in early, service machines, and prevent significant breakdowns. Comparatively, robots are also cheap. Aside from the initial purchase cost and scheduled maintenance, the costs of "hiring" robots can be much less than hiring people for 24/7 surveillance.

Is A \$140 Smart Water Bottle For Kids Worth the Price?

Smart water bottles are designed to entice children to drink more water, but they aren't all that smart, and the high price tag due to problems in the supply chain are limiting consumer adoption.

Nowadays, children often do not like to drink water, and that has become a great concern for some parents. As a result, it has opened up a business opportunity for children's water bottles. And any old water bottle won't do; it's got to be a smart water bottle.

Products labeled "smart" are popping up en masse. At the same time, the price is multiplying. Recently, I found a children's smart water bottle that sold for \$140 (1,000 RMB). Is this meant to be an IQ tax?

This smart water bottle is equipped with basic functions such as a regular drinking reminder, daily water consumption planning, and water consumption records (connected to a mobile device app through Wi-Fi). It is also equipped with an electronic screen that has social interaction, as well as a music/story player and interactive game functions. It is like a small robot.