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TALK TO US

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Cerebras Engine Shifts to the Cloud

The second-generation wafer scale engine from Cerebras, built to accelerate large-scale AI workloads, is now available for public use in the cloud via specialist AI cloud provider Cirrascale. ACS-2 system, which houses the second-generation wafer scale engine, has been installed at Cirrascale’s Santa Clara, Calif., location

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COM-HPC Module Unleashes Up To 80-Core Arm Edge Server Soc

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Adlink announced a COM-HPC/Server module featuring Ampere’s up to 80-core Ampere Altra Arm server SoC, which uses Arm’s Neoverse N1 architecture. The module will first become available in an automotive focused AVA Developer Platform. The COM-HPC Ampere Altra is the first COM-HPC/Server module we have covered, although we have reported on several smaller, more embedded COM-HPC/Client modules. These include Congatec’s Tiger Lake-U based Conga-HPC/cTLU and Tiger Lake-H powered Conga-HPC/cTLH, and Eurotech’s Tiger Lake-U based CPU-180. For more on COM-HPC, you can check out our report on MSC’s Coffee Lake driven MSC HCC-CFLS, which was the first fully announced COM-HPC module.

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Xilinx, which is soon to be acquired by AMD, has kicked off its virtual Xilinx Adapt 2021 conference with some announcements regarding its Versal ACAP processor family, among other technologies. The news follows the FPGA-focused chipmaker’s July announcement of its Versal ACAP HBM Series (high bandwidth memory) variation on its Versal ACAP Prime and Premium series, which similarly target datacenter and networking applications. Versal ACAP HBM incorporates HBM2e DRAM, “providing 820GB/s of throughput and 32GB of capacity for 8x more memory bandwidth and 63% lower power than DDR5 implementations,” says Xilinx.

Arm’s SOAFEE Brings Automotive to the Cloud

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The software architecture enables cloud technologies to be combined with automotive functional safety and real-time requirements. SOAFEE prototyping and early development are underway.

This is an excellent move by Arm, and it is likely to succeed. SOAFEE leverages many growth trends in automotive software development, including using cloud platforms along with related technology and ecosystems. SOAFEE is also positioned to benefit from the growing automotive demand for software-as-a-service (SaaS).

Renesas and OmniVision Develop Integrated Reference Design for HD Automotive Camera Systems

Renesas Electronics Corp. and OmniVision Technologies Inc. have developed an integrated reference design for a high-definition automotive camera system. The new design features Renesas’ recently introduced Automotive HD Link (AHL) technology that transmits high-definition video over low-cost cables and connectors. The AHL components in the design pair with OmniVision’s OX01F10 1.3MP SoC, which provides the industry’s best imaging performance across a wide range of challenging lighting conditions, along with the most compact form factor and lowest power consumption.

HD video is increasingly important in car safety systems for object recognition functionality. The new RAA279971 AHL encoder and RAA279972 decoder use a modulated analog signal to transmit the video, enabling transmission rates 10 times less than required to transmit HD signals digitally.

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The second-generation wafer scale engine from Cerebras, built to accelerate large-scale AI workloads, is now available for public use in the cloud via specialist AI cloud provider Cirrascale. ACS-2 system, which houses the second-generation wafer scale engine, has been installed at Cirrascale’s Santa Clara, Calif., location.

Cerebras joins a handful of AI chip startups with hardware available for customer workloads in the cloud, including Graphcore and Groq.

Cirrascale, a cloud offering designed especially for AI workloads including autonomous driving and natural language processing, also has Graphcore hardware available in its cloud alongside Nvidia GPUs, plus AMD Epyc and IBM Power CPUs.