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Imagination Unveils 'GPU of Everything' Family

Making its most significant new GPU family announcement for 15 years, Imagination Technologies this week unveiled its IMG A-Series, the tenth generation of its PowerVR architecture.

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4D Imaging Startup Develops Sensor to 'See Through Walls'

Israeli startup Vayyar Imaging Ltd. has raised \$109 million in a series D financing round to scale its 4D radar imaging technology and further expand the range of applications. The total capital raised to date is \$188 million

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Qualcomm Battles 5G 'Misconceptions'

5G mmWave is not really happening. 5G rollout will take a long time. There are no compelling 5G apps. Qualcomm executives complained that these statements are "5G misconceptions," insisting they can be easily debunked.

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TALK TO US



Ultra-low Power Bionic Chip Treats Alzheimer's

The first artificial digital neuron has been created in the laboratory, with the aim of restoring lost brain functions. Scientists plan to use these chips to treat neurodegenerative diseases.

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UltraSoC Donates Trace Encoder

One of the biggest arguments made against open source processors has been the inherent nature of an open-source environment; being open-source means the support ecosystem can be fragmented, and hence vendors can't provide developers with assurances that relevant tools and support are available as they progress through the design cycle.

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Imagination Unveils ‘GPU Of Everything’ Family

Making its most significant new GPU family announcement for 15 years, Imagination Technologies this week unveiled its IMG A-Series, the tenth generation of its PowerVR architecture. Calling it the ‘GPU of everything’, the new cores introduce a new GPU architecture with single 128-thread wide ALU to boost performance and power efficiency.

The company said the A-Series is 2.5x faster (or 150%) for the same area and same power compared to its currently shipping PowerVR GPUs, making it inherently more power efficient. For the same performance it is now 60% lower power.

The new GPU family enables performance scalability ranging from an entry-level 1 pixel per clock (PPC) part right up to 2 TFLOP cores for performance devices, and beyond that to multi-core solutions for cloud applications.

4D Imaging Startup Develops Sensor to ‘See Through Walls’

Israeli startup Vayyar Imaging Ltd. has raised \$109 million in a series D financing round to scale its 4D radar imaging technology and further expand the range of applications. The total capital raised to date is \$188 million.

Superman vision

At the time Raviv Melamed, Naftali Chayat, and Miri Ratner founded Vayyar, their ambition was to develop an alternative for breast cancer detection, using RF to quickly and affordably look into human tissue and detect malignant growth. Eight years later, their 4D imaging sensor goes beyond the medical sphere to serve a myriad of markets.

Vayyar claims it has designed a small, sensor-based chip that, with its 72 transmitters and 72 receivers, tracks and maps everything without a camera. It detects obstacles and monitors people’s location, movement, height, posture and vital signs wirelessly, in all lighting and weather conditions, and in real time. A key differentiator is its ability to “see” through walls, closed doors, and other solid objects, the company said.

Qualcomm Battles 5G ‘Misconceptions’

MAUI – Qualcomm stormed the beaches of Maui this week to host Qualcomm Tech Summit, an annual boondoggle for media and analysts from everywhere, with a single objective: to debunk “5G misconceptions” allegedly entrenched in the market and trumpeted by the press.

These misconceptions, according to Qualcomm, range from “mmWave is not really happening yet” and “5G rollout will take a long time,” to “where are all the 5G apps?” The communication chip giant insisted that all this can be easily debunked.

Take, for example, the currently unfolding of 5G network launches.

A year ago at the Tech Summit, said Qualcomm President Cristiano Amon, “We were talking about the 5G future.” But this year, “We are talking about tremendous momentum happening across regions.”

Ultra-low Power Bionic Chip Treats Alzheimer’s

Alzheimer’s is a neurodegenerative disease that involves a progressive death of neurons with cognitive, behavioral, and motor consequences; it is a bit like taking away the soul of the person affected, devastating not only for patients but also their families. Alzheimer’s disease remains difficult to treat, but researchers are exploring new nanotechnology solutions that might help improve the quality of life of those afflicted.

An international research team led by scientists from the British University of Bath in the U.K. has created the first artificial neurons in the laboratory, miniature devices designed to repair nerve circuits and restore lost functions. Scientists plan to use such bionic chips to treat both heart-related and neurodegenerative diseases.

UltraSoC Donates Trace Encoder

One of the biggest arguments made against open source processors has been the inherent nature of an open-source environment; being open-source means the support ecosystem can be fragmented, and hence vendors can’t provide developers with assurances that relevant tools and support are available as they progress through the design cycle.

With this in mind, UltraSoC believes that it has made a major step to address this challenge, by announcing it will offer an open source implementation of its RISC-V trace encoder via the OpenHW Group. Speaking to EE Times, Rupert Baines, CEO of UltraSoC, said this is a significant step: the availability of a production-grade, standards-compliant processor trace solution is a key enabler for developers and supports the OpenHW Group’s aim of creating an open, commercial grade ecosystem for development based on open-source processors.