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FH MONDAY

Ambarella Targets AV Domain Controllers with Next-Gen AI Engine

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BMW Highlights Color-Changing Car

When the Ford Motor Company started making the first mass-produced car, the Model T, it made much of the slogan that eager customers can have 'any color as long as it's black'.This week at the —mostly virtual— Consumer Electronics Show (CES) in Las Vegas, German car maker BMW completely up-ended that concept.

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Nvidia Acquires Bright Computing

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TALK TO US

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TDK Unveils Robotics Development Platform With ROS2 Support

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As vehicle architectures move away from a single electronic control unit per feature towards zonal and larger, centralized domain controllers, and more vehicle functionality relies on compute-intensive AI processing, vehicle processors are growing rapidly. The flagship SoC in Ambarella's new CV3 family includes an AI accelerator the company rates at 500 eTOPS (meaning its performance is equivalent to a 500-TOPS GPU). It also includes a vision processor, 16 ARM cores, a GPU and other hardware.

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This week at the —mostly virtual— Consumer Electronics Show (CES) in Las Vegas, German car maker BMW completely up-ended that concept.

It demonstrated its iX Flow concept car which, at the press of a button, can change color, albeit initially, it will only work between black and white, with a few shades of grey in between.

BMW's iX Flow concept car can change color at the press of a button (Image source: BMW)

The E-Ink technology used, similar to that used by Amazon in its second generation Kindle e-readers, will "bring the car body to life" the company says, with a wraparound skin.

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While its acquisition of chip IP vendor Arm remains stalled in regulatory limbo, GPU leader Nvidia did manage to pull off a separate if less flashy acquisition this week, announcing a deal for HPC software specialist Bright Computing.

When asked, Nvidia said details of the transaction would not be disclosed.

Based in Amsterdam, privately-held Bright Computing was spun out from Linux integrator ClusterVision in 2009. Its software is used to provision and manage HPC and Kubernetes container clusters along with private clouds, including those running in data centers on the OpenStack cloud computing platform.

Samsung Boosts 5G Download Speeds to 8Gbit/s

Samsung claims it has once again raised the bar for 5G download speeds with trials at is U.S. R&D facility in Texas, in collaboration with Qualcomm.

The South Korean group said it has achieved download data rates of 8.08 Gbit/s using its massive MIMO radio and virtualized radio access gear as well as 256 Quadrature Amplitude Modulation (QAM) technology and Qualcomm's Snapdragon X65 5G chips.

The companies suggest that, at these download rates, applications such as augmented and virtual reality (AR and VR), and improved high-quality video streaming start becoming commercial realities, as well as huge opportunities in transportation and analytics.

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In its latest report, 70 Technology Trends That Will— And Will Not—Shape 2022, ABI Research anticipates that a total of 45,000 cobots and 452,000 mobile robots will be shipped in 2022, up 65% and 51% year-over-year.

Robots are gaining momentum, but as Anson Yeganegi, senior manager for business development, Robotics, at TDK InvenSense, said during a press conference at CES 2022, "one of the biggest frustrations that we've heard from our customers is that there is a lot of technology that goes into building a generic robot, and they have to go to multiple vendors."