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TALK TO US



The Current State of Car to Cloud Connectivity

Vehicles are getting connected. That's a good thing. But they are getting connected in haphazard and slapdash ways, and that's not good at all. Each car has multiple connectivity needs and, to date, car makers tend to satisfy each need by adding another, different connection.

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China to Maintain Chip Output Despite Virus

Chinese chip companies in the Wuhan area are not cutting back on production despite the spread of a deadly coronavirus which had infected more than 10,000 people as of Friday. Local companies in Wuhan, suddenly in spotlight, appear focused on downplaying the impact of the deadly virus.

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TI Reveal Automotive SoC with an AI Accelerator

TI has added a dedicated AI accelerator to one of its automotive SoCs for the first time, in a move that perfectly illustrates the growing adoption of deep learning techniques in automotive ADAS systems. The new deep learning block is based on TI's brand new C7x DSP IP plus an in-house-developed matrix multiplication accelerator.

The TDA4VM, one of the two first SoCs launched as part of the Jacinto 7 series, combines sensor pre-processing and data analytics designed to handle inputs from 8-megapixel front-mounted camera systems. Alternatively, the TDA4VM could handle four to six 3-megapixel cameras operating simultaneously alongside inputs from radar, lidar and ultrasonic sensors. These cameras and sensors enable advanced driver assistance systems (ADAS) such as automated parking. Deep learning can be used to fuse data from different sensors or to enable techniques such as object detection.

Legacy DRAM Shows Promise at the Edge

TORONTO — There has been plenty of discussion about how emerging memories might address opportunities created by the Internet of things (IoT) and obviate the need for expensive options such as SRAM. One company thinks low-pin DRAM may be the answer.

Richard Crisp, vice president and chief scientist for imaging and memory product development at Etron, said the company's DRAM represents a divergence from traditional architecture along the JEDEC road map to address applications that don't require the growing density, high pin speed, or all the bandwidth available in the latest DDR4, which has a minimum capacity of four gigabits. "There are a lot of applications out there that use significantly less than one gigabit worth of memory," he said. "There's interest in just having right-sized memories that are easy to use."

Qorvo Acquires UWB Chip Provider

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But that's just what happened this week. Decawave, a fabless semiconductor company that develops UWB technologies, chips and modules, has been acquired for a reported \$400m by Qorvo, a developer of radio frequency (RF) ICs.

Decawave said the acquisition will advance market penetration of IR-UWB (impulse radio UWB), which enables more precise location information compared to other wireless technologies such as GPS, Wi-Fi and Bluetooth. IR-UWB technology enables accurate indoor location services, secure communications, context aware user interfaces and advanced analytics.

The Current State of Car to Cloud Connectivity

Vehicles are getting connected. That's a good thing. But they are getting connected in haphazard and slapdash ways, and that's not good at all. Each car has multiple connectivity needs and, to date, car makers tend to satisfy each need by adding another, different connection. The electronics industry is eager to provide consolidated connectivity solutions, but most major automobile companies remain dedicated to developing proprietary technologies, which means auto makers and their suppliers are figuratively reinventing the wheel on a constant basis.

What follows is an overview of the connectivity requirements by the automobile industry. We then compare several solutions offered by some of the more prominent vendors in the electronics

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Local companies in Wuhan, suddenly in spotlight, appear focused on downplaying the impact of the deadly virus. For example, Yangtze Memory Technologies Co., Ltd. (YMTC), a budding Wuhan-based manufacturer of 3D NAND flash, issued a statement this week, saying that it is taking steps to protect employees. It claims that current operations "are normal and orderly."

The company has strictly ensured the safety of employees in accordance with government regulations, delayed the return time of foreign employees, and encouraged remote work if conditions permit, reported EETimes China. There are no cases of infection in the factory, and the chip maker has promoted epidemic prevention, issued masks, temperature tests, and strengthened disinfection for employees on the job.