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Cadence Modus Test Solution Supports ARM MBIST Interface

Cadence Design Systems' Modus test solution has enabled support for safety-critical system-on-chip (SoC) designs using the ARM Memory Built-In Self Test (MBIST) interface.

To demonstrate the success of the collaboration, Cadence and ARM have completed silicon validation using an ARM Cortex-A73 processor in conjunction with the Modus test solution's automatic test pattern generation (ATPG) and diagnostic capabilities.

Through Cadence's support of the ARM MBIST interface, customers can deliver SoC designs to market faster and with better power, performance and area (PPA). For example, the Modus test solution provides ARM MBIST interface users with the option for programmable memory built-in self test (PMBIST) to use a single bus to service multiple memories with one MBIST controller. The solution utilises the ARM MBIST interface to reduce the impact of MBIST on critical timing paths to and from memories in functional operation and for a higher quality at-speed test. Finally, the Modus test solution provides a physical-to-logical mapping capability, which reduces the need for manual, error-prone work

Jaguar Enters EV Arena With Electric Concept SUV

Tata Motors-owned luxury brand Jaguar is making a clean entry into the electric car arena with the launch of a battery-powered concept sport utility vehicle, which it expects to hit the road in 2018.

According to the company, the I-PACE packs performance-tuned features including a target 0-60mph time of at least four seconds, a 310-plus mile range and a 50kW DC charging mechanism to help it reclaim 80% of its total range capability from zero in 90 minutes (measured on the U.S. EPA test cycle)—all in a five-seater SUV.

"The I-PACE Concept is a radical departure for electric vehicles. It represents the next generation of battery electric vehicle design. It's a dramatic, future-facing design—the product of authentic Jaguar DNA matched with beautiful, premium details and British craftsmanship," said Jaguar director of design lan Callum.

AMD's Rocm Update Supports New GPU Hardware

AMD has rolled out a new release of Radeon Open Compute Platform (ROCm), an open source platform that features support for new GPU hardware, math libraries and modern programming languages.

In addition to support of new Radeon GPU hardware and other features designed to speed development of highperformance, energy-efficient heterogeneous computing systems, AMD also announced planned support of OpenCL as well as support for a wide range of CPUs in upcoming releases of ROCm, including for AMD's upcoming "Zen"based CPUs, Cavium ThunderX CPUs, and IBM Power 8 CPUs.

"Radeon Open Compute is a platform for a new era of GPU problem-solving, designed to harness the power of open source software to unlock new solutions for HPC and hyperscale computing," said Raja Koduri, senior vice president and chief architect, Radeon Technologies Group, AMD. "

Samsung Makes 10nm Q'comm SoC

NEW YORK – Qualcomm announced it is in production with its next generation mobile SoC, the Snapdragon 835, in Samsung's 10nm process. The news came at a briefing here where Qualcomm withheld release of other details of the new chip.

The chip becomes the first mobile SoC at 10nm beating rivals such as Apple which is reportedly using TSMC's 10nm process for a planned iPhone 8 chip and Mediatek which announced it could deliver the first 10nm SoC. The news highlights the intense race for profits at the high-end of the smartphone market and how that race is driving semiconductor process technology.

Startup Programs Multicores on Data, Not Gut

TOKYO — Multicores have been the force behind computing for more than a decade. The very idea of gaining speed in processing by breaking up problems in multiple pieces and computing the parts simultaneously took the electronics industry by storm.

But when it comes to programming a multicore system — whether multicores are homogeneous or heterogeneous, such an insurmountable task has been left to engineering teams' "empirical experience" or their "seat-of-the-pants" programming, observed Kumar Venkatramani,vice president, business development at Silexica. "Software for these multicores has not come of age yet," he said.

Silexica (Aachen, Germany) announced Wednesday that the next generation of the company's SLX Tool Suite is shipping now.