CAN Newsletter Online

CAN FD PLUGFEST

Robust operation of controller IP Core

The CAN FD controller IP Core by Cast met or exceeded bit-rate and error handling tests in its second CAN FD plugfest. It ran in representative automotive networks from Ford and General Motors.

Impressions of the plugfest (Photo: Cast)

The CAN controller offered by Cast has successfully undergone a second round of real-world-like testing at the CAN FD plugfest run by CAN in Automation at Ford's facility in Detroit. The plugfest gathered twenty firms to evaluate how well their CAN FD products work together in network topologies that emulate actual automobile environments. These rigorous tests of error handling and interoperability go beyond specification conformance to evaluate how well a data link or physical layer CAN controller product might perform in the real world, where robustness is life critical.

Sourced from Fraunhofer IPMS, the CAN-CTRL CAN/CAN FD controller core is one of the ASIC RTL and FPGA netlist IP cores to support all current and proposed specifications (CAN, ISO and non-ISO CAN FD, and TTCAN). It is also the first soft IP core to undergo a second year of CiA plugfest testing. It did well last year, and improvements based on that experience helped it exceed even the developer's expectations in last week's testing.

"The controller performed very well, with no major issues at higher than standard bit rates and against conformance tests being prepared for the upcoming ISO 16845-2 international standard," said Dr. Frank Deicke, business unit manager, Wireless Microsystems, Fraunhofer Institute for Photonic Microsystems (IPMS). "Moreover, we coupled our data link controller core with the latest physical transceivers from On Semi, NXP, and Infineon, and were the only participants using these vendors' latest CAN FD implementations."

The CAN FD Controller IP Core is available through Cast worldwide, with a reference design board and other development aids plus Verification IP from partner Avery Design Systems.

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