

CAST and Fraunhofer IPMS Introduce CAN XL Bus Controller IP Core

*New CAN XL option for the proven CAN Bus Controller IP Core is ready
for evaluation and use by early adopters*

Woodcliff Lake, NJ — September 8, 2020 — Silicon intellectual property provider CAST, Inc. and developer Fraunhofer IPMS today announced a new option for their popular CAN 2.0 and CAN FD Controller IP Core that adds support for the evolving CAN XL standard.

CAN XL is a new data communications protocol under development since 2018 by the [CAN XL Special Interest Group](#) organized by CAN in Automation (CiA) with the participation of automotive and semiconductor representatives (including Fraunhofer IPMS). The goal is to give the CAN protocol “extra-large” capabilities by increasing its data payload size—to 2048 byte—and its transmission bit rate—up to 10 Mbit/s—while retaining interoperability with CAN 2.0 and CAN FD. CAN XL thus extends the benefits of the CAN protocol to more demanding applications, providing an intermediate step between signal-oriented CAN FD and service-oriented high-speed Ethernet networks.

Aimed at early adopters, the new CAN XL option for CAST’s CAN-CTRL IP core adds support for CiA’s 610-1 CAN XL data link layer and physical signaling specification. It includes all the expected technical functions and features, plus any future updates required to match the final ratified ISO specification (free for customers with a maintenance agreement). Demonstrations, evaluation versions, and attractive pricing are available now through [CAST Sales](#).

“For automotive engineers, CAN XL fills a bandwidth gap between the CAN bus they love and the emerging TSN Ethernet backbone they need,” said Marcus Pietzsch, leader of the ASIC and FPGA Design group at Fraunhofer IPMS. “Forward-looking customers have been seeking a means to evaluate CAN-XL in their own networks and develop early products for some time. Being involved in the specification process, we have waited until now to ship a capability that should actually match or come very close to the final ISO standard.”

The new CAN XL option further improves one of the most capable and reliable CAN bus cores available. The [CAN-CTRL CAN 2.0 & CAN FD Bus Controller](#) IP core supports the original Bosch protocol and the ISO 11898-1;2015 standard, handles time-triggered operation (TTCAN, as per 11898-4 level 1), is optimized for the AUTOSAR architecture and the SAE J1939 protocol, and features a safety-enhanced version ready for ISO-26262 ASIL-B certification.

The CAN-CTRL core with its new CAN XL option is part of the broad line of leading-edge and standards-based digital IP available from CAST. This includes Time-Sensitive Networking (TSN) Ethernet and other automotive interfaces; compression engines; microcontrollers and processors; SoC security modules; and a variety of peripherals, interfaces, and other IP cores. Learn more by visiting www.cast-inc.com, emailing info@cast-inc.com, or calling +1 201.391.8300.

CAST is a trademark of CAST, Inc. Other trademarks are the property of their respective owners.
CAST, Inc., 11 Stonewall Court, Woodcliff Lake, NJ 07677 USA • phone: +1 201.391.8300
###

Media Contact: Paul Lindemann, Montage Marketing, paul@montmark.com, +1 603.490.4985