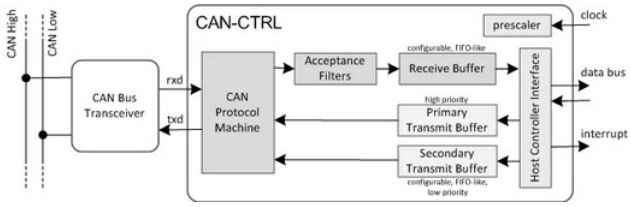
CAN Newsletter Online

IP core supports CAN FD: Who is next, please?

CAN FD is making its way around: Cast (USA) is the next supplier introducing an IP core supporting the CAN FD protocol. The company has started shipping what it believes is the first available CAN controller soft IP core that complies with the improved CAN protocol.

SOURCED FROM FRAUNHOFER IPMS (GERMANY), the revised product adds CAN FD support to the classic CAN controller core that Cast has carried for several years. The core's extension supports the CAN FD protocol released by Bosch in April 2012. The improved protocol has been submitted to ISO for international standardization. It will be introduced in ISO 11898-1, which already specifies the classic CAN protocol.



The block diagram shows the typical internal structure of a CAN controller with protocol engine and internal message buffers (Photo: Cast)

"CAN FD makes the stability and reliability benefits of the CAN bus available to designers of today's more data-hungry systems, and we're excited to be the first delivering this capability in an easy to use and integrate soft core via our partnership with Fraunhofer," said Nikos Zervas, Cast's chief operating officer. "The flexibility and performance of this royalty-free CAN controller core have already helped some fifty customers get to market on time and on budget, and we expect this FD option to help many more."

The CAN Controller 2.0/FD IP core is available in VHDL or Verilog source code, or in FPGA netlists. Deliverables include scripts and a test bench for basic verification; work is underway with Avery Design Systems for a complete suite of CAN FD-compatible Verification IP. The 20-year old company also provides royalty-free IP cores featuring 8- and 32-bit micro-controllers and processors with peripherals.