Xilinx brings FlexRay to FPGA

Christoph Hammerschmidt - June 22, 2007

MUNICH; Germany — FPGA maker Xilinx has implemented FlexRay IP on its Spartan-3 Automotive FPGA platform. The device interacts with the FlexRay middleware and protocol stack from Vector Informatik.

The offering is based on Xilinx' Logicore FlexRay controller IP. Implemented as a single-channel controller for the FlexRay automotive data bus system, the IP is positioned as a fast alternative to older CAN bus devices. FlexRay does not only offer a tenfold increase in bandwidth over CAN but also a deterministic behavior, based on a time-triggered approach.

With the move, Xilinx intends to strengthen its offerings targeted at automotive applications including driver assistance systems, gateways and other time-critical automotive functions, the company said. "Tier One and OEM automakers looking for a real-time and high-speed replacement for CAN will find that the flexibility to configure the number of transmit and receive buffers, for example, allow for a network interface optimized for the application at hand", explained Xilinx automotive system architect.

The Xilinx IP is streamlined to work with the FlexRay middleware and drivers from Vector Informatik. In addition, Xilinx recently has completed work with the software provider developing low-level drivers for its CAN bus Logicore IP. Xilinx said it will continue to invest in building optimized vehicle networking IP cores for the XA automotive line of its FPGAs.