eSOL's eCROS Platform with eT-Kernel Multi-Core Edition RTOS to Support Xilinx Zynq-7000 EPP

Enables a blend of SMP and AMP solutions with real-time capability and reliability on the Zynq-7000 EPP system

Tokyo, Japan. May 7, 2012 – eSOL, a leading developer of real-time embedded software solutions, announced today that its eCROS real-time OS-based integrated software platform now supports the Xilinx® Zynq™-7000 Extensible Processing Platform (EPP). eCROS for Zynq-7000 EPP consists of the eT-Kernel Multi-Core Edition real-time OS, tightly integrated eBinder development tools, middleware, and professional services. Zynq-7000 EPP, which combines the ARM Cortex-A9 multi-core processor and Xilinx FPGA technology, provides high performance and scalability.

eSOL will demonstrate eCROS for Zynq-7000 EPP at eSOL booth #West 6-14 at the Embedded Systems Expo May 9-11 at Tokyo Big Sight.

Software developers implementing the eT-Kernel Multi-Core Edition OS with eSOL's unique Blended Scheduling® technology can produce flexible systems that enable SMP and AMP programs to coexist. Developers also can use open-source software assets such as Linux and TRON to reduce development time and cost. The eT-Kernel Multi-Core Edition RTOS adds fast real-time response and high reliability for a wide array of Zynq-7000 EPP-based sophisticated embedded systems including automotive, industrial, and medical devices.

eSOL worked closely with Xilinx as a member of the Xilinx Alliance Program to develop

eCROS for Zynq-7000 EPP. eSOL has extensive experience in applying its real-time OS technology to ARM 11/ARM Cortex-A9 MPCore multi-core processors as a member of the ARM Connected Community.

eCROS for Zynq-7000 EPP targets the ZC702 Evaluation Kit, which features the XC7Z020 CS484-1 EPP. eSOL will also provide USB host and device stacks, an SD memory card driver, and an Ethernet driver that supports peripheral devices.

The Blended Scheduling feature of the eT-Kernel Multi-Core Edition blends the high-throughput capability of symmetric multi-processing (SMP) with the ability of asymmetric multi-processing (AMP) to ensure deterministic real-time response and permit the reuse of single-core processors' software assets. Since its release in 2006, the eT-Kernel Multi-Core Edition has been adopted for use in a wide variety of embedded systems, including car navigation systems.

Combining the eT-Kernel Multi-Core Edition with eT-Kernel Multi-Core Edition Memory Partitioning and eT-Kernel Temporal Partitioning ensures higher reliability in multi-core systems. The eT-Kernel Multi-Core Edition supports both POSIX and TRON open standard interfaces. The tightly integrated eBinder development environment provides a rich set of tools and functions to facilitate accurate multi-programming, which is important for multi-core software development, and debugging and analysis of complex multi-core systems. With eBinder, developers can develop high-quality multi-core software in less time and at lower cost.

"We believe eSOL's real-time OS technology for multi-core processors enables software developers to make the most of features in Zynq-7000 EPP." said Mark Jensen, Director of Processing Platform Marketing at Xilinx. "We also believe that tightly integrated eBinder development tools greatly simplify complex multi-core software development."

"The Xilinx Zynq-7000 EPP offers high performance, low power consumption, flexibility and scalability for multi-core applications," said Nobuyuki Ueyama, Executive Vice President of eSOL. "eSOL's multi-core real-time OS technology features, and eCROS platform will add high real-time capability and reliability to this powerful new Xilinx system. "

About eSOL

eSOL is a leading embedded software developer that enables customers to accelerate development of applications based on high-end embedded processors including multi-core. eSOL's advanced, scalable, multi-profiled real-time operating systems are tightly integrated with development tools and middleware components to create flexible development platforms used by OEMs and ODMs worldwide in competitive vertical markets such as automotive, consumer electronics, industrial and medical equipment, and aerospace. Founded in 1975, eSOL is based in Tokyo, Japan.

For more information, please visit http://www.esol.com/