Toyota's Car Navigation Systems Operated by eSOL's eT-Kernel Multi-Core Edition RTOS

eSOL eBinder IDE Used To Develop Car Navigation Applications









Tokyo, Japan. November 8, 2011 - eSOL, a leading developer of real-time embedded software solutions, announced today that the eT-Kernel Multi-Core Edition real-time OS is being used in multiple genuine Toyota car navigation systems, including "NHZA-W61G", developed by Aisin AW Co., Ltd., and "NSDD-W61" developed by Denso Corporation. The NHZA-W61G system received the 2011 Good Design Award presented by the Japan Institute of Design Promotion. The eBinder integrated development environment (IDE) was used to develop some of applications running on those systems. The eBinder IDE can be used for real-time software development on both single-core and multi-core processors.

Car navigation systems are continuously evolving to make driving safer, reduce environmental burdens, and improve driver and passenger comfort. Car manufacturers have implemented more and more functions in their new car navigation systems, enhancing connectivity and communication, and coordinating with electric vehicle control systems, other vehicles' systems, transportation infrastructures, cloud information centers, and other electrical devices such as mobile phones. Toyota's Tier 1 automotive suppliers selected the eT-Kernel Multi-Core Edition RTOS because the RTOS enables the rapid implementation of new features and functions while maintaining excellent real-time performance and high reliability. It also meets the strict requirements of connectivity-related applications such as collaboration with vehicle control systems and inter-vehicle communications.

The eT-Kernel Multi-Core Edition, released in 2006, is an advanced RTOS for multi-core processors, which advanced multifunction car navigation systems often require.

The exclusive Blended Scheduling® technology used in eSOL's eT-Kernel Multi-Core Edition RTOS provides software developers with the scalability and high-throughput efficiency of SMP, along with the more deterministic and real-time characteristics and software reusability of AMP in a single RTOS. When used together with eSOL's optional Memory Partitioning, the Multi-Core Edition RTOS can detect any memory access violation so that the quality of multi-core systems is assured even when integrating independent systems with different levels of reliability on a multi-core processor.

eT-Kernel Multi-Core Edition also features individual module loading and fast boot capability. Individual module loading helps navigation software developers to easily update and add applications. Fast booting enables fast restart of car navigation systems and eliminates users' frustration. eSOL's eBinder IDE provides software developers high-quality development tools and functions, enabling them to create multi-core software in less time and at lower cost. "We have enhanced and improved the eT-Kernel RTOS and the eBinder IDE to meet strict requirements for quality, performance, and functions for in-vehicle systems since Denso selected our RTOS and IDE for their car navigation systems in 2005." said Nobuyuki Ueyama, Executive Vice President of eSOL. "Since then, eT-Kernel and eBinder have been adopted in many in-vehicle infotainment systems. We also offer first-rate professional services. Because of our experience and knowledge of embedded systems development for various OSes, we are able to provide strong support for in-vehicle system development."

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. Our 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/