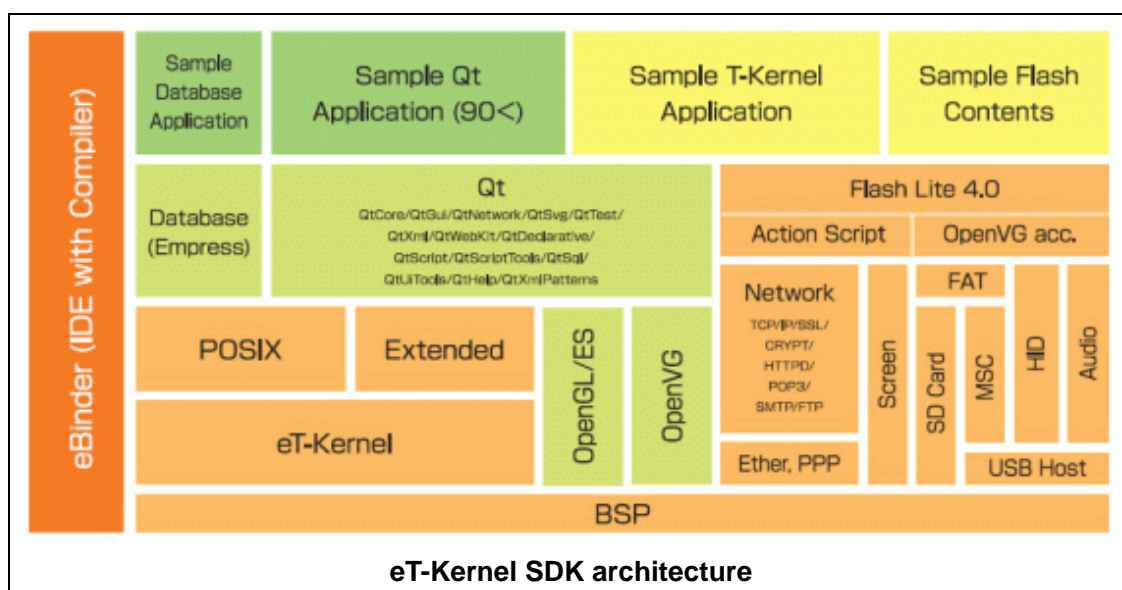# eSOL's New, Fully Integrated, RTOS-Based 'eT-Kernel SDK' Available Ready to Use Out of the Box

Provides High Software Reusability, Real-Time Performance and Reliability; Rivals GPOS Sound, Network, and File Functions

eT-Kernel SDK architecture

Tokyo, Japan. December 8, 2010 - eSOL, a leading developer of real-time embedded software solutions, today announced the **eT-Kernel SDK**, a new, ready-to-use software platform that enables software developers to build application frameworks "out of the box". In addition, the use of open source specifications provides high software reusability. The eT-Kernel SDK is based on the highly reliable eT-Kernel RTOS, which is used worldwide in applications such as car navigation systems, satellites and other spacecraft, and various embedded devices.

The eT-Kernel SDK integrates major functions such as sound, network, file systems, and

databases for intelligent embedded devices equivalent to those available with GPOSes.

The eT-Kernel SDK reinforces graphics functions with open source specifications that improve software reusability. The platform includes Nokia's Qt™ application and UI framework — and includes extensive Qt demonstrations and sample applications, which enables developers to easily evaluate Qt. Other open source graphics software includes Adobe® Flash® Lite™ for viewing multimedia content on mobile phones and other portable devices, and Open GL/ES and Open VG graphic drivers from the Khronos Group, a not-for-profit industry consortium.

The eT-Kernel RTOS, the core of the eT-Kernel SDK, also includes **eT-Kernel/POSIX**, a POSIX-compliant RTOS that supports more than 900 open source POSIX APIs. POSIX APIs' high compatibility with Linux accelerates the reuse of existing Linux software and the utilization of engineers who have UNIX application development experience. The **eT-Kernel Multi-Core Edition** enables developers to evaluate multi-core systems. A major feature is Blended Scheduling®, which makes possible the coexistence of a variety of AMP and SMP programs in a single system.

"The eT-Kernel SDK allows developers to utilize the same environment as that of Windows and Linux, while taking full advantage of T-Kernel's excellent real-time performance and high reliability," said Prof. Ken Sakamura, Professor of Information Science at the University of Tokyo and Chairman of the T-Engine Forum. "We expect that the eT-Kernel SDK will accelerate the use of T-Kernel in a broader array of embedded systems."

Developers can immediately begin prototyping applications by means of an optimized boot image of the eT-Kernel SDK, thus avoiding time-consuming configuration and build work. In addition, eT-Kernel SDK run-time software, which includes OS, middleware, and drivers, is optimally configured to meet prototyping requirements such as real-time response performance and other functions. The eT-Kernel SDK can be used to prototype and develop any type of embedded application, including car-infotainment systems, handheld terminals, multimedia devices, office automation devices, and factory automation systems.

The eT-Kernel SDK architecture includes eSOL's eBinder development suite. With eBinder's tools and features, designed specifically for RTOSes, developers can solve system issues quickly and optimize the use of the OS.

This first version of the eT-Kernel SDK comes with the EC-4260 System-on-Chip (S0C) (NaviEngine-MID) from Renesas Electronics which incorporates the ARM11 MPCore Multi-core processor.

Endorsements from eSOL ecosystem partners

Yuzuru Utsumi, VP of Sales, ARM

"We welcome the release of eT-Kernel SDK. eSOL, a major member of the ARM Connected Community, has abundant experience and a proven track record in ARM cores, including its latest product line of ARM Cortex-A9 MPCore and ARM Cortex-A8. We believe eT-Kernel SDK will be the desirable solution for advanced embedded software development based on the ARM core."

Hiroaki Kaneko, General Manager, Automotive Systems Division, MCU Business Unit, Renesas Electronics

"The eT-Kernel RTOS has been noted for its performance and reliability. eSOL is an important Renesas partner that supports software development based on Renesas Electronics' SoCs including the EC-4260 SoC (NaviEngine(R)-MID) for car infotainment systems. We expect eT-Kernel SDK will definitely enable faster, less costly embedded software development."

Naoyuki Mochizuki, Director Executive Officer, General Manager, Industrial Systems Sales Division, SRA
"SRA looks forward to a beneficial relationship with eSOL and its eT-Kernel SDK. SRA implemented the incorporation of Qt from Nokia and we will provide customers Qt-specific professional services in association with eSOL."

David Zhang, President , Empress Software Japan Inc.
 "Empress Software Japan welcomes the release of eT-Kernel SDK, which incorporates the Empress Embedded Database, the market leader in North America for nearly 31 years. The Empress Embedded Database offers features that traditional file system could not offer; that is, complete separation of data management and application, flexibility in introduction or enhancement of new features, fast search and update for data access, ODBC access, data replication, High availability guarantees data integrity and enables faster time to market."
Kunihiko Tsuji, General Manager, Kyoto Microcomputer Co.
"Kyoto Microcomputer has enjoyed a good, long relationship with eSOL, which has incorporated our PARTNER-Jet JTAG emulator in the eBinder IDE. Using PARTNER-Jet with eT-Kernel will enable developers to develop their high-end embedded systems much more efficiently."

Toshiyuki Yamada, General Manager, Embedded Products Business Unit, Yokogawa Digital Computer Corp.

"We expect eT-Kernel SDK will make it possible to speed software development and bring high-quality products to market much more quickly. We're also pleased that developers will have access to our adviceLUNA JTAG emulator, a valuable component in developing software requiring real-time performance."

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.co.jp