

March 26, 2009

Press Release

T-Engine Forum

Free Release of the Source Code of Multi-core version of T-Kernel

T-Engine Forum (Location: Shinagawa City, Tokyo, Chair: Ken Sakamura, Professor of the University of Tokyo), which standardizes and promotes the ubiquitous computing infrastructure technology, starts the public release of the source code of "MP T-Kernel" supported on multi-core processor at the web site (<http://www.t-engine.org/>) from March 26, 2009 for free.

MP T-Kernel is part of the real-time OS "T-Kernel" family for embedded systems released from T-Engine Forum, and supports multiprocessor and multi-core processor.

Current embedded systems, often come with devices which demand for high performance processing power of the recent PCs, e.g. car navigation system. Generally, cooling fan is used for personal computers to dissipate heat generated by CPU, but it may not be used for embedded devices due to space constraints, etc. Also, if embedded devices are to be operated on batteries, etc., they need to operate with low power consumption. Therefore, increasing the number of the processors in order to improve the processing capability of the whole device has been developed instead of increasing the CPU's operating frequency. Multi-core CPU supports this method.

T-Engine Forum will release the two types of the MP T-Kernels: AMP T-Kernel for Asymmetric Multiple Processor and SMP T-Kernel for Symmetric Multiple Processor. The multi-core processors which MP T-Kernel now supports are NEC Electronics Corporation's "NaviEngine(R)" with four ARM11 cores and Renesas Technology Corp.'s "SH7786" with two SH4A cores.

T-Engine Forum will release the specification for AMP T-Kernel and SMP T-Kernel,

and the source codes of AMP T-Kernel and SMP T-Kernel implemented on each CPU to the public for free.

T-Engine Forum expects the release of MP T-Kernel to contribute to improvement of development efficiency of embedded-device and early realization of ubiquitous computing environment.

*T-Kernel family

T-Kernel family includes T-Kernel Standard Extension with the middleware such as process management, file management, etc. and μ T-Kernel for 8 bit and 16 bit CPU as well as T-Kernel for 32 bit CPU.