Japan Embedded Systems Technology Association (JASA)

PRESS RELEASE

JASA started work on the specification of OpenEL for Robot

On 16 November 2011, Japan Embedded Systems Technology Association (JASA)*1 announced that Platform Research Group of Engineering division has started work on the specification of OpenEL (Embedded Libraries) for Robot*2.

OpenEL for Robot is an open platform to standardize the specifications of the software implementation of robotics and control systems.

Currently, porting existing software on different systems, including the device driver in the development of embedded systems has been considerable effort required. For example, turning on the LED or just to operate the motor on different hardware, there may spend many days. Because an application program interface to control the output of the sensors and motors, were each uniquely defined by the device manufacturer, has been implemented since.

Therefore, JASA propose to unify these interfaces which were different for each device manufacturer. JASA focus on robotics and control systems, has started drafting specifications OpenEL for Robot. In OpenEL for Robot, by the base portion of the software platform for robotics and control systems, and aims to enable applications running on different hardware too soon. This increases the portability and reusability of the software, resulting in improved quality, lower costs and lead to improved productivity is expected to improve convenience for users and developers.

Future, JASA plan to collaborate with the following organizations : National Institute of Advanced Industrial Science and Technology (AIST), Tokyo Metropolitan Industrial Technology Research Institute, Tokyo Metropolitan University, Nagoya Institute of Technology, Robot-related organizations, and JASA member companies.
A draft of this specification will be publicly available at the end of this fiscal year. And we plan to use for promoting public awareness.

Minoru Yanada, Chairman of JASA says：
JASA was established, efforts to promote standardization in the microelectronics industry for Embedded Systems Applied Technologies, we strive to uplift the industry and activity. In announcing this OpenEL for Robot to uplift the quality and productivity while reducing the production cost of embedded software, to achieve further development in the embedded industry, convinced that determine the success of "making things" in Japan.

Kenichi Nakamura, Chairman of Platform Research Group of JASA says：
Platform Research Group, since its inception in year 2000, have continued the research about the hardware or software platform for embedded systems, such as CPU, FPGA, real-time OS, Embedded Linux and Android. And, we have announced publicly the results. More recently, we researched the business side, such as Open Innovation and Platform Leadership, we have been looking for ways to apply to the embedded industry. OpenEL for Robot is a revolutionary project that never before. It is a uniform software interface for device manufacturers. I believe that it will create a new trend of embedded software development.

Reference

*1 Japan Embedded Systems Technology Association (JASA)
The purposes of the Association are to contribute to healthy industrial development of Japan and improvement of national life. These purposes are achieved by improving embedded systems technology, raising users' convenience through standardization of applied microelectronics technology, protection of rights, and investigation research, etc., for the embedded systems industry (development, manufacturing, and sale of product using microelectronics technology, and system using such product).
(See JASA website: http://www.jasa.or.jp/ top/en/index.html)

*2 OpenEL(Embedded Libraries) for Robot
OpenEL for Robot is an open platform to standardize the specifications of the software implementation of robotics and control systems.
Specifically, it is API (Application Program Interface) standardized on the layer below the middleware. It is a mechanism for device control, such as the output to the motor, the input from the sensor and so on. It improves software portability, reusability and productivity.

Example :
elLedOn(), elLedOff(), elLedBlink(), elMotorPowerOn(), elMotorPowerOff() etc.

Enquiries concerning this issue should be directed to:

Japan Embedded Systems Technology Association (JASA)
TEL:+81-3-5821-7973　e-mail : jasainfo@jasa.or.jp
http://www.jasa.or.jp/ top/en/index.html