Simulation and Testing Technology of OSEK Network Management Functions

**Feature**
This technology provides software development tool of OSEK network management (NM). It consists of NM function simulation software, manual testing software, and auto-testing software. The NM functions include the construction and maintenance of logic-ring, sleep and awake, limp home function, adding and removing node, etc. The manual testing software simulates multiple ECUs on PC. In addition, one real ECU can be incorporated into this system through CAN interface. Various network management functions can be tested by pressing buttons on the screen and the real ECU. The auto-test software supports fully automatic function testing of network management. This tool can be used to develop and test software of network management rapidly.

**Technique**
1. OSEK Direct Network Management
2. Data Access of On Board Unit
3. Firmware Development of Micro-controller
4. Software Development of Personal Computer

**Specification**
1. OSEK Direct Network Management
2. PIC 32 Micro-controller
3. Windows XP Operation System
4. CAN Bus (2500 kbits/sec)

**Demonstration**
Coupling of real ECU and virtual network

Screenshot of developed network simulator

Screenshot of auto-testing tool