

Nintendo Switch Game Console Adopts eSOL μ ITRON 4.0-Compliant RTOS and exFAT File System



Nintendo Switch

Tokyo, Japan. June 22, 2017 –eSOL, a leading developer of real-time embedded software solutions, today announced that its μ ITRON 4.0-compliant real-time operating system (RTOS) and exFAT file system have been adopted in the Nintendo Switch™ game console developed by Nintendo Co., Ltd. The μ ITRON 4.0-compliant RTOS is used for control applications such as near field communication (NFC) in the Nintendo Switch's Joy-Con™ controller. The exFAT file system provides file functions for the high-speed transfer of data to and from microSD, microSDHC, and high-capacity microSDXC memory cards inserted into the Nintendo Switch console.

The eSOL's μ ITRON 4.0-compliant RTOS is fully compliant with the μ ITRON 4.0 standard profile. In addition to those functions defined in the standard profile, the RTOS also includes various extensions as well as proprietary functions that are useful in practical application development, such as functions for referencing the status of the kernel object and system trace functions. The RTOS has been adopted in a wide range of devices, from mobile phones, digital cameras, car navigation systems, and printers through to factory automation systems.

The exFAT file system supports FAT12/16/32 and exFAT. It provides high-speed support for large files such as video, audio, or images stored on high-capacity media such as USB memories or external hard disks that are not compatible with the

legacy FAT32 file system. As well as retaining the features of the VFAT file system, which supports FAT12/16/32 and VFAT (long file names), the exFAT file system also incorporates numerous functions that are needed for digital cameras and other digital home appliances, such as the high-speed file pointer reverse seek function required for features such as fast rewind, and functions to minimize damage to the file system in the event of a power disconnection or media removal. It also supports functions needed for products intended for overseas markets, including multilingual support, a dynamic character code switching function, and a Unicode support option.

▽ For more information about the Nintendo Switch: <https://www.nintendo.com/switch/>

▽ Nintendo web site: <https://www.nintendo.com/>

▽ Case studies of eSOL product users: https://www.esol.com/successstory/rtos_middleware.html

"I am honored that Nintendo has chosen to use eSOL products in the Nintendo Switch, just as it did in its predecessor the Wii U™. The μITRON 4.0-compliant real-time OS and exFAT file system are already used in a wide variety of digital consumer goods. eSOL intends to continue providing strong support for developers of digital consumer devices and other embedded software systems," said Nobuyuki Ueyama, Executive Vice President of eSOL.