

SDIOWorx, an Embedded SDIO Stack/Bus Driver

embWiSe Technologies, being a member of the SD Card Association, has released its SD/SDIO Stack/Bus Driver architecture framework (**SDIOWorx**) on ThreadX OS. ThreadX OS is an embedded Operating System from Express Logic Inc., USA and is very popular in Consumer Electronics (CE) devices like Digital Cameras, Printers, Digital Camcorders, etc.

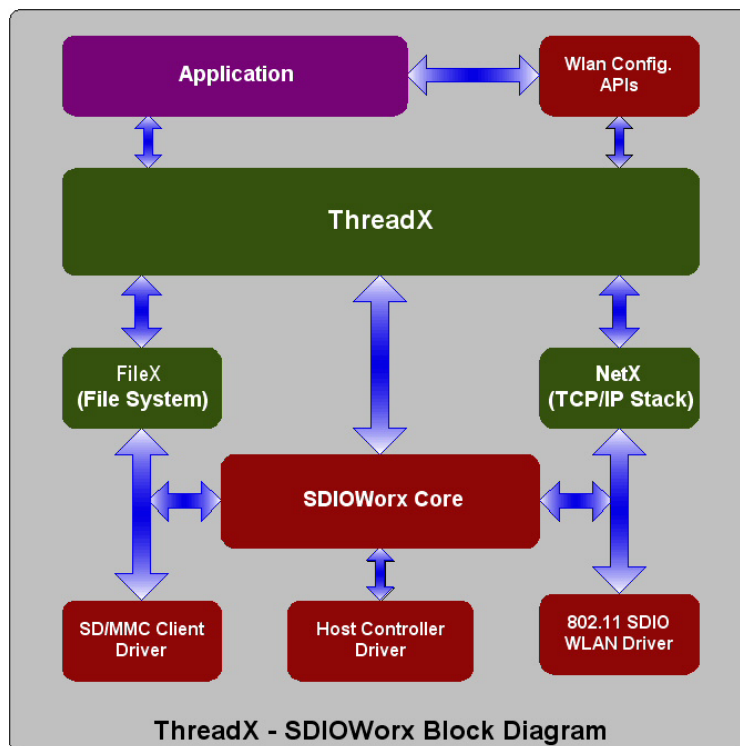
SD/SDIO is also finding traction on these devices and is likely to be defacto standard for storage and I/O like WiFi, Bluetooth, etc., embWiSe had partnered with Express Logic to port their SDIOWorx stack onto ThreadX OS.

SDIOWorx Overview:

The initial version of SDIOWorx on ThreadX comes complete with driver support for an ARM9 based SDIO Host controller from Samsung (S3C2410) and client cards/devices conforming to SD specification 1.10. The client driver components in the SDIOWorx framework for ThreadX support SD/MMC Memory and SDIO –WiFi. embWiSe intends to support their ThreadX version of SDIOWorx on other popular Host Controllers as well.

embWiSe, in partnership with a couple of leading WLAN chipset/hardware vendors, provides an SDIO-WiFi client driver (802.11 b/g) under ThreadX. With more and more CE devices adding wireless functionality, embWiSe's SDIOWorx under ThreadX packaged with WiFi driver support, provides a compelling value proposition to the Mobile CE device vendors.

The architecture of the SDIOWorx Stack under ThreadX OS is illustrated below:



SDIOWorx for ThreadX Features:

- Currently Supported Processor : **ARM9**
- Standards Compliance :
 - SD Physical Layer Specification ver 1.10
 - SDIO Card Specifications ver 1.10
 - MMC Specification ver 3.31
- Supports 1 bit and 4 bit bus modes
- Multiple Host Controller Handling within the stack
- Multiple Slot Support within a Host Controller
- Client Driver handling for Multi-Function SDIO and SD Combo Cards
- Platform Independence:
 - OS Independent Architecture wrapped around a thin OS layer
 - Processor Independent Stack and Drivers
 - Developed in ANSI C
- SDIO Peripheral Client Driver Support:
 - **SDIO-WiFi in Binary**
 - **SD/MMC Memory driver in Source Code**
- Flexible Licensing options

embWiSe also offers NRE services around SDIO and WLAN technologies:

- Develop SDIO Host and Client Drivers around SDIOWorx
- Develop SDIO-WLAN client drivers
- Porting of SDIOWorx to other OS platforms
- Develop SDIO Host and Client Drivers around any other SDIO Stack/Bus Drivers on Linux, WinCE.NET 4.x/5.0, PocketPC, Windows Mobile / Smartphone platforms.

Contact embWiSe, the SDIO development specialists at info@embwise.com for a single window SDIO solution for any specific requirement for support /services for SDIO Drivers on different OS/hardware platforms.

