*emb*Wi*S*e
Total WiFi Connectivity Solutions

SDIOWorx
an Embedded SDIO Stack Package

Faster Time to Market with lesser costs:

embWiSe, an acronym of 'Embedded Wireless Systems Engineering', provides complete embedded WiFi driver software and security supplicant framework leveraging expertise in WiFi, interconnect technologies like SDIO, SPI, PCI / PCIe and USB, embedded OS and SoC platforms. embWiSe is well placed to provide its hybrid software products/services solutions, that enable WiFi connectivity in connected device designs on any processor, OS and WiFi chipsets, **faster and at a lesser costs.**

embWiSe Technologies, being a member of the SD Card Association, has developed an OS independent EMBEDDED SD/SDIO Stack/Bus Driver architecture framework (SDIOWorx), which enables software designers to develop and integrate SDIO support in the end products. SDIOWorx is supported on several OS platforms including embedded Linux, Android, ThreadX RTOS, NucleusPlus, uITRON OS, QNX and FreeRTOS.

SDIOWorx Overview:

The SDIOWorx comes complete with driver support for SDIO Host controllers and client cards / devices conforming to SD specification 2.0. The software components in the Embedded SDIOWorx framework support SD / MMC / SDHC / eMMC Storage and SDIO controllers / peripherals in an embedded device.

SDIOWorx is tested and validated on standards based SD Host controllers as well as several ARM 7/9/11 core based processors from Marvell, Texas Instruments, Freescale, Samsung, Atmel and Conexant.

embWiSe additionally offers SDIO-WiFi drivers for the following WiFi chipsets, integrated with the SDIOWorx framework:
- Marvell 88W8686/88W8688,
- Marvell 88W8786/88W8787
- QualcommAtheros AR6002/AR6102 and
- QualcommAtheros AR6003/AR6103

SDIOWorx

SDIOWorx Features:

- **Embedded OS Support:**

  Linux, Android, ThreadX RTOS, NucleusPlus, uITRON, QNX and FreeRTOS

- **Standards Compliance :**

  » SD Physical Layer Specification ver 2.0

  » SDIO Card Specifications ver 1.10

  » MMC Specification ver 3.1/4.1

- Supports all of the bus modes SD/SDIO/MMC (1 bit and 4bit)

- 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 Host Controller tested and validated on:**

  » Standards based SD Host Controllers and several ARM core based processors / SoCs from leading semiconductor vendors

  » SDIO Peripheral Client Driver Support

  » SDIO-WiFi Driver for Marvell and Qualcomm Atheros 802.11a/b/g/n WiFi chipsets

  » SD / MMC / MMC4.x / SDHC / eMMC Storage drivers in Source Code

- Flexible Licensing options

Benefits to Designers:

- Savings on investment required for building an SD/SDIO Bus Driver from ground-up

- Enables addition of SD/SDIO card support to embedded devices in with minimal effort and time

- Reduces Time-to-Market for the Host Controller silicon vendors and the Peripheral Card vendors

- Production ready SDIO-WiFi driver in Binary or in Source for connected device designs

Contact

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.

Member SD Card Association