

SDIOWorx, an Embedded SDIO Stack Package under Linux

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 embedded Linux versions 2.4.x and 2.6.x, MontaVista's CEE 3.1 and Mobilinux 4.0.

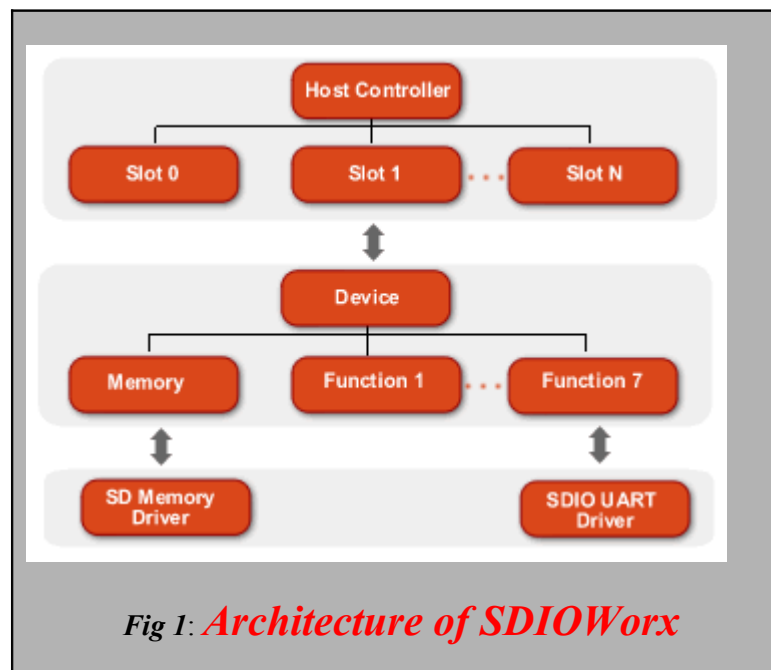
SDIOWorx Overview:

The SDIOWorx comes complete with driver support for SDIO Host controllers and client cards/devices conforming to SD specification 1.10. The software components in the Embedded SDIOWorx framework support SD/MMC/SDHC Storage and SDIO controllers/peripherals in an embedded device.

The Linux version of SDIOWorx is tested and validated on standards based SD Host controllers, Marvell's PXA270/PXA320, TI's OMAP 2430/3430/DaVinci DM6446/DM350, Freescale's iMX21/iMX27/iMX31, RMI's Alchemy AU1200, Samsung's S3C2410/2440, Atmel's AVR32/AP7000 and AT9SAM9260 processors with future support planned for other host platforms. **embWiSe is the only third party software vendor in the world, to support these popular Host platforms targeting Mobile/CE and Converged Device market.**

embWiSe additionally offers SDIO-WiFi drivers for Marvell 88W8686/88W8688 chipsets and SocketMobile's Go Wi-Fi! P300 and P320 SDIO-WLAN Cards. The drivers are thoroughly tested and validated on all of the above Host platforms and includes support for the opensource WPA/WPA2 supplicant.

The SDIOWorx Stack/Bus Driver architecture is illustrated below:



SDIOWorx Features:

- Embedded OS Support: Linux 2.4.x/2.6.x, MontaVista's CEE 3.1 and Moblin 4.0
- Standards Compliance :
 - SD Physical Layer Specification ver 1.10
 - 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 on x86, Marvell's PXA270/PXA320, TI's OMAP2430/3430/Davinci DM6446/DM350, Freescale's iMX21/iMX31/iMX27, RMI's Alchemy AU1200, Samsung's S3C2410/2440 and Atmel's AVR32/AP7000/ AT9SAM9260
 - SDIO Peripheral Client Driver Support:
 - SDIO-WiFi Driver for Marvell SD8686/SD8688 and SocketMobile's Go Wi-Fi! P300 and P320 SDIO-WLAN cards
 - SD/MMC/MMC4.x/SDHC 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 for connected device designs**

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.

