embWiSe

SDIOWorx for Nucleus Plus RTOS

Presented by: embWiSe

Features

- **Developed in partnership with Mentor Graphics**

- **OS independent embedded SD/MMC/SDIO Stack – Highly Portable**

- **Standards Compliance :**
  - **SD Physical Layer Specification ver 1.10/2.0**
  - **SDIO Card Specifications ver 1.10**
  - **MMC Specification ver 3.1/4.1**

- **Supports all of the bus modes SD/SDIO/MMC (1-bit,4-bit and 8-bit)**

- **Multiple Host Controller Handling within the stack**

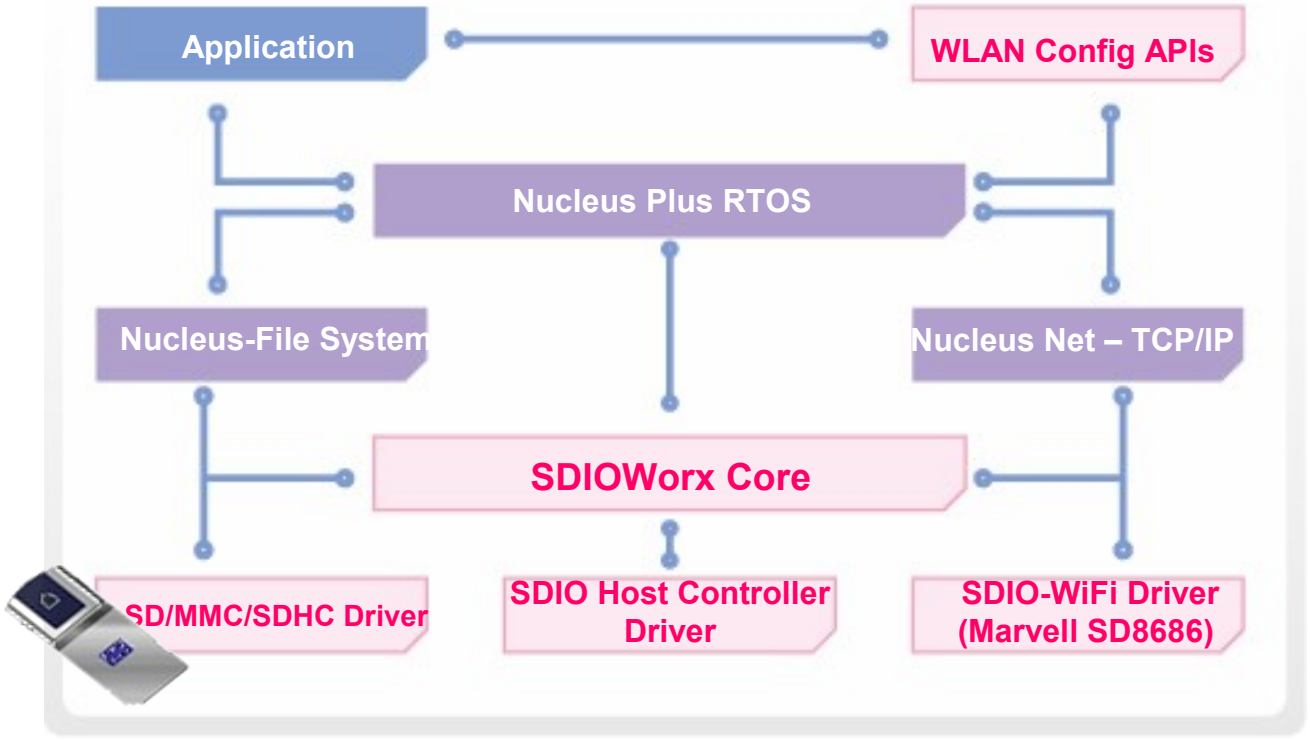
- **Optimized for Nucleus Plus RTOS**

Features contd.

- **Platform Independence:**
  - OS Independent Architecture wrapped around a thin OS layer
  - Processor Independent Stack and Drivers
  - Developed in ANSI C
- **Handles device initialization, enumeration, automatic clock settings and bus width settings**
- **Also handles Device to Client Driver matching (based on vendor / device IDs, Function Numbers and Device classes)**
- **A set of well defined APIs for sending commands and getting responses**
- **Also provides APIs for the most commonly used functions (i.e. enable/ disable interface, set block length, SDIO interrupt handling etc.)**

Nucleus Plus

SDIOWorx Architecture



Value proposition

Production ready drivers under Nucleus Plus :

- ***SD/MMC3.1/4.1/SDHC Memory Drivers (with Nucleus File System)***

  - Tested upto 16GB SD High Capacity (SDHC) Cards

- ***SDIO-WiFi Driver for Marvell 88W8686 (with Nucleus-NET TCP/IP Stack)***

  - Supports Infrastructure and Ad-hoc Modes

  - WEP support

Benefits

- ***Complete off-the-shelf SD Storage,SDIO Stack and SDIO-WiFi Driver Solution under Nucleus Plus RTOS***
- ***Enables Easy testing and validation of SDIO functionality in Host Controller onchip the SoC under Nucleus Plus***
- ***Reference Client Drivers help in expediting other Client Driver designs***
- ***Reduces Engineering Lead-Time and Time to Market!***