

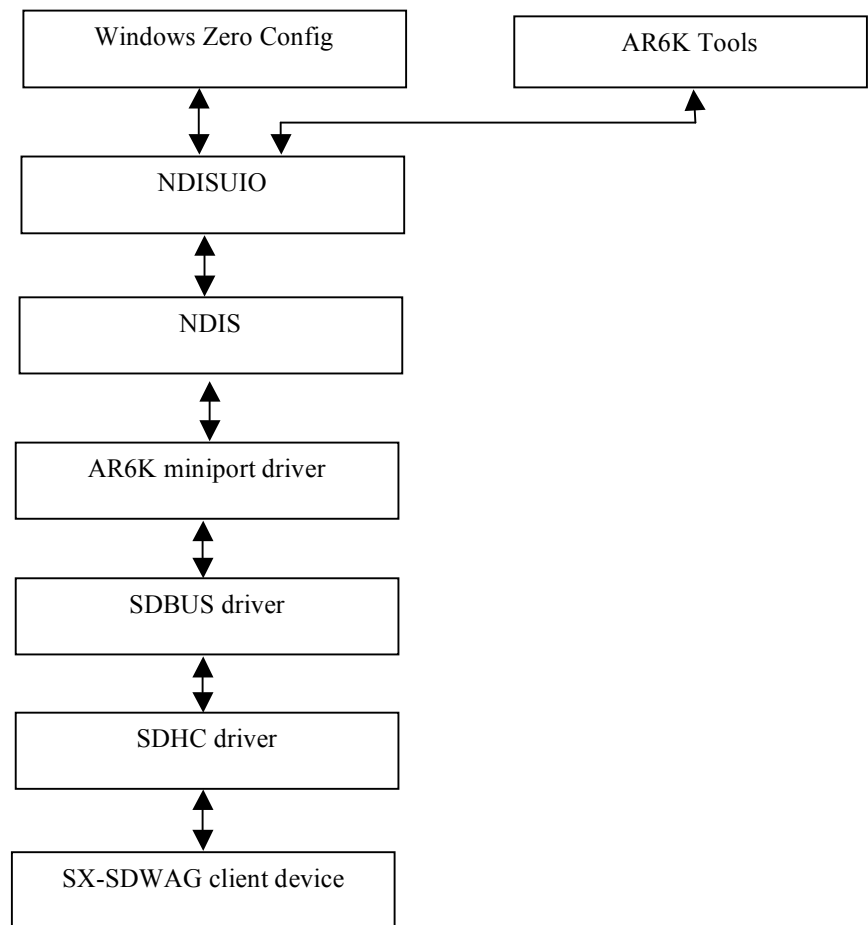


Windows CE / Windows Mobile 802.11a/b/g SDIO Wireless Driver Overview

Introduction

The Silex SX-SDWAG is an 802.11a/b/g wireless module that is based around the Atheros AR6K chip technology. It communicates with the host system through an SDIO interface. The specific SX-SDWAG model for Windows CE/Windows Mobile applications is the SX-SDWAG-CE.

The SX-SDWAG Windows CE/Windows Mobile Host driver is an NDIS miniport driver. The following diagram describes how the driver interfaces with the components of the Windows CE/Windows Mobile subsystem.



The AR6K Miniport driver, AR6K Tools and AR6K client device are Atheros developed components and WZC, NDISUIO, NDIS and SDBUS driver are part of Windows CE/Windows Mobile OS. The SD Host controller is either from the Windows CE/Windows Mobile OS or from a Vendor BSP component.

OIDs

The SX-SDWAG is controlled through NDIS OIDs and Atheros Private OIDs. The OIDs are implemented through the AR6K Wireless Message Interface (WMI) commands. The OIDs are mapped to one or more WMI commands. The WMI commands are sent to the AR6K target and the target sends the control information through the Events. The host driver generates appropriate NDIS events to inform the status change.

Supplicant

The SX-SDWAG Windows CE driver is compatible with the standard Windows CE 5.0, Windows CE 6.0 and Windows Mobile 6 WPA/WPA2 supplicant. It can also be used with user-provided custom supplicants.

Operating System Support

The SX-SDWAG Windows CE driver is supported on Windows CE 5.0, Windows CE 6.0 and Windows Mobile 6 (you must use this driver with the Silex SX-SDWAG-CE 802.11a/b/g SDIO card). Silex can provide services to port this driver to your specific hardware platform requirements.