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RKDevInfoWriteTool User Guide

(Technical Department, R & D Dept. II)

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Revision History

Version no.	Author	Revision Date	Revision Description	Remark
V1.0.1	Lan Shunhua	2018.10.17	Initial version release	
V1.0.3	Lan Shunhua	2019.01.01	Rename rk_provision_tool as RKDevInfoWriteTool	

Contents

一、 Overview

RKDevInfoWriteTool is used to write user defined data into VendorStorage partition, such as SN, Wi-Fi, IMEI, and other user defined data, which will not be lost after the device is reset to factory setting.

Two kinds of device mode: maskrom and loader mode

The way to enter maskrom: short connect FLASH CLK pin, must select the correct MiniLoaderAll.bin to write SN in this mode.

The way to enter loader: press "volume+" or adb reboot loader command, to write SN in this mode, there must be existing image in the device.

Currently uboot version based on next-dev branch only supports RPMB to write SN in loader mode.

Other uboot versions based on develop branch support to write SN in both MASKROM and loader modes. Previous 3.10 kernel using IDB mode memory needs to use compatible mode to write SN.

Three modes to write SN:

Mode	Tool configuration	Description	Support chipset
Common mode	Unselect "RPMB" and "Compatible mode"	both loader and maskrom can write SN	RK3399, RK3288
RPMB mode	select "RPMB"	The device using uboot of next-dev branch only supports to write SN in loader mode	RK3326, RK3308
Compatible mode	select "compat"	Used for previous 3.10 kernel version, use IDB mode memory	

If you don't know which mode to use, please try the above three modes one by one.

二、**Write SN configuration**

1、**Main interface of the write SN tool**
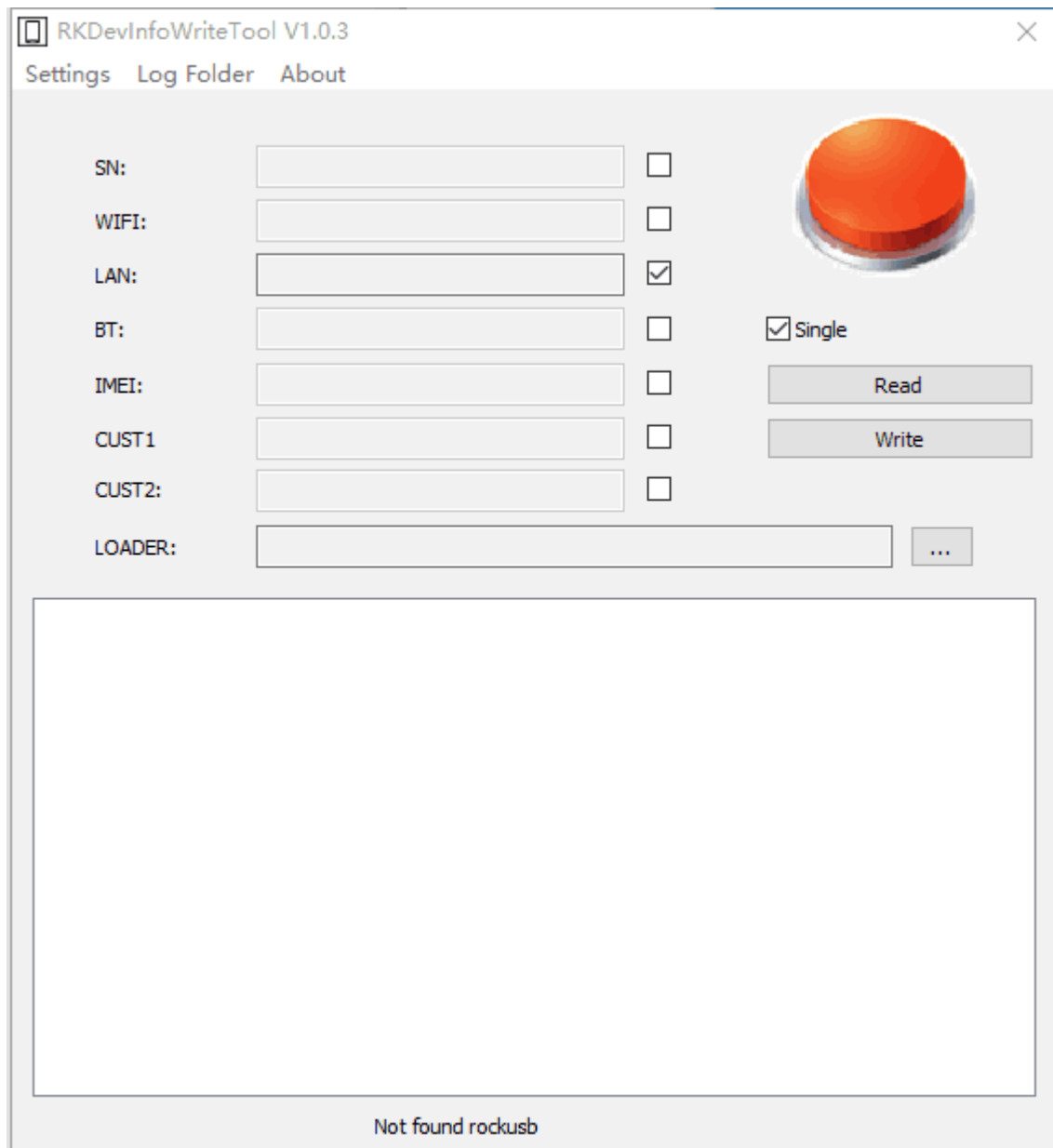
1) **Single read/write:** select "single read/write", need to press "read" or "write" again to read or write SN every time the device is connected.

2) **Continuous read/write:** unselect "single read/write", it will automatically trigger read/write operation when new device is connected. When write SN, in manually input mode, after all the items are input, press Enter button will also trigger the write operation, which is convenient for users to use scanner to write SN. Note that the auto enter function should be set at the end of scanner.

3) **LOADER:** select MiniLoader file, if the device is in maskrom, must select the correct MiniLoader file.

2、Configuration interface of the write SN tool

Common configuration

1) Compatible mode: select "compat" to write SN, in this mode, you can select "Force MASKROM" to force the device to write SN in maskrom, or unselect "Force

MASKROM", then the device should be switched to loader mode first to write SN (generally this mode is not used now).

2) Common mode: both "compat" and "RPMB" are unselected.

3) RPMB: select RPMB mode to write SN.

The following two items are configurable only for user defined:

4) ID: SN, Wi-Fi, LAN MAC, BT and other data items are saved in VendorStorage partition, each data item is retrieved by one ID, and only "CUST1" and "CUST2" items support user defined ID.

5) Binary: determine whether the input item is binary or not. Such as "11223344", if it is binary format, the actual byte written into the device is "0x11 0x 22 0x33 0x44", if it is not binary format, the actual input is "11223344" string.

Write SN configuration

The write SN tool supports to write 7 items at the same time, five of which are pre-defined (ID is fixed, cannot be modified), and the other two are user defined by modifying ID. Uboot and kernel use ID to separate the contents input by user. Users can select three kinds of input method to write SN:

1) Manual mode

Directly input the target data item from keyboard or scanner in the main interface.

2) Self-incrementing mode

Users set the start item, prefix and suffix, incrementing by decimal, or hexadecimal to generate and input the data item.

3) File mode

Obtain the target data item from the file, if "Binary File" is selected, it will input the whole file. If unselected, it will treat the selected file as text file, input one line each time.