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USBCloner The Burn tool Quick Guide

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Contents

1 Overview

USBCloner burn tool is based on a new code framework developed. This document describes the burning process of USBCloner burn tool that to avoid unnecessary use of questions.

1.1 Operating environment support

USBCloner supportted the systems as follows:

1）Windows XP、Win7 and above version（32bit,64bit);

2）Ubuntu12.04 and above version（32bit，64bit);

1.2 The composition of burn tool

Burn tool consists of two parts:

1）cloner.exe : the burn tool user interface (The program can be run directly by the user).

2）core.exe : the core of the burn tool.

1.3 The burn tool package

There are two versions for different platform :

1） cloner-x.x.x(version number)-windows_release.zip

2） cloner-x.x.x(version number)-ubuntu_release.tar.gz

2 Install the driver

USBCloner has Linux and Windows version. on Linux, USBCloner do not need to install the driver. Therefore, this section was for Windows XP, for example, this paper introduces Windows host driver installation steps. USBCloner driver need't Microsoft signature certification.

Note: when you install the drive under Windows, be sure to follow the documentation instructions to install it. When you install the drive under Windows 8, you first need to configure the system to disable the driver mandatory signature". Specific steps can be found on the Internet

- **Press the boot key and press the reset key to push the board into the burning mode. When the board is connected to the PC, it automatically searches for drive installation and indicates that the drive installation failed。**
- **Right click on "my computer" to "manage",and you can find devices that have not successfully installed USB drivers under other devices in the device manager，** As shown in figure**2-1**。

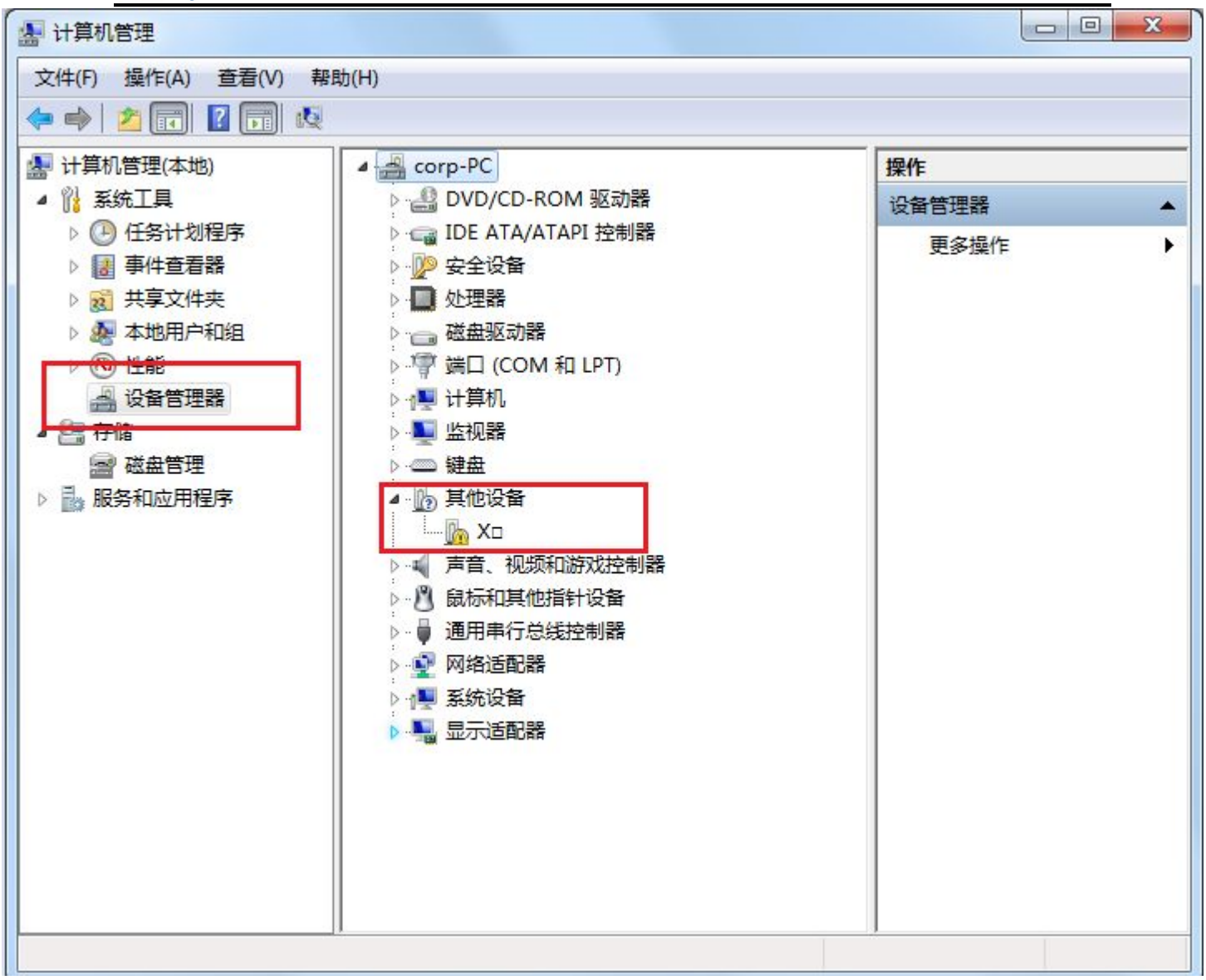


Figure 2-1 identification devices

- **Right click on the current USB device and select update driver software to pop up, as shown in Figure 2-2**

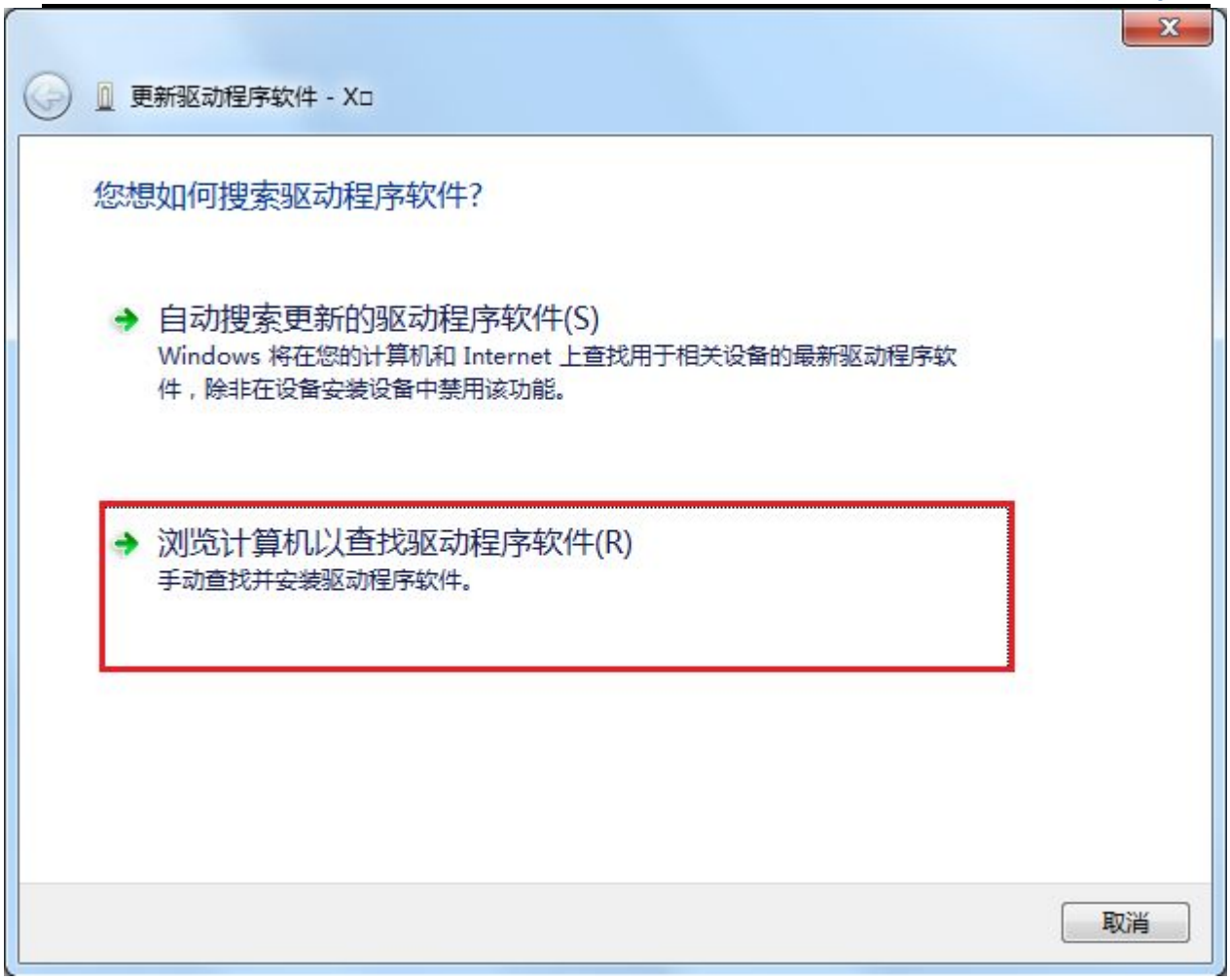


Figure 2-2 select Manual lookup

- **Select "browse the computer to find driver software", pop up like figure 2-3, click browse, and then select the drive directory cloner-win32-driver in the downloaded burn tool unpack directory**

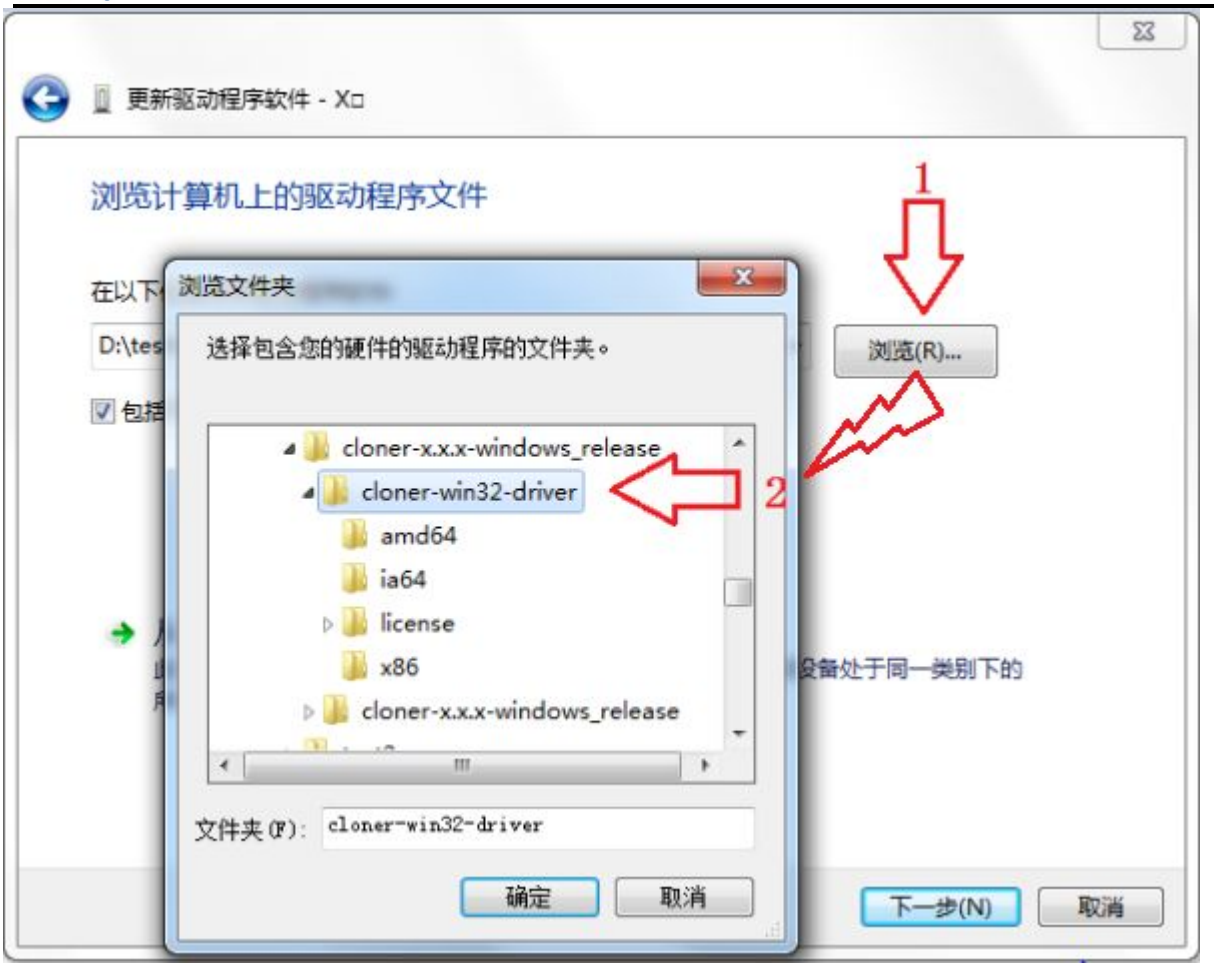


Figure 2-3 selecting the drive path

- **Then click OK, and then click "next" to drive the installation successfully, as shown in figure 2-4.**

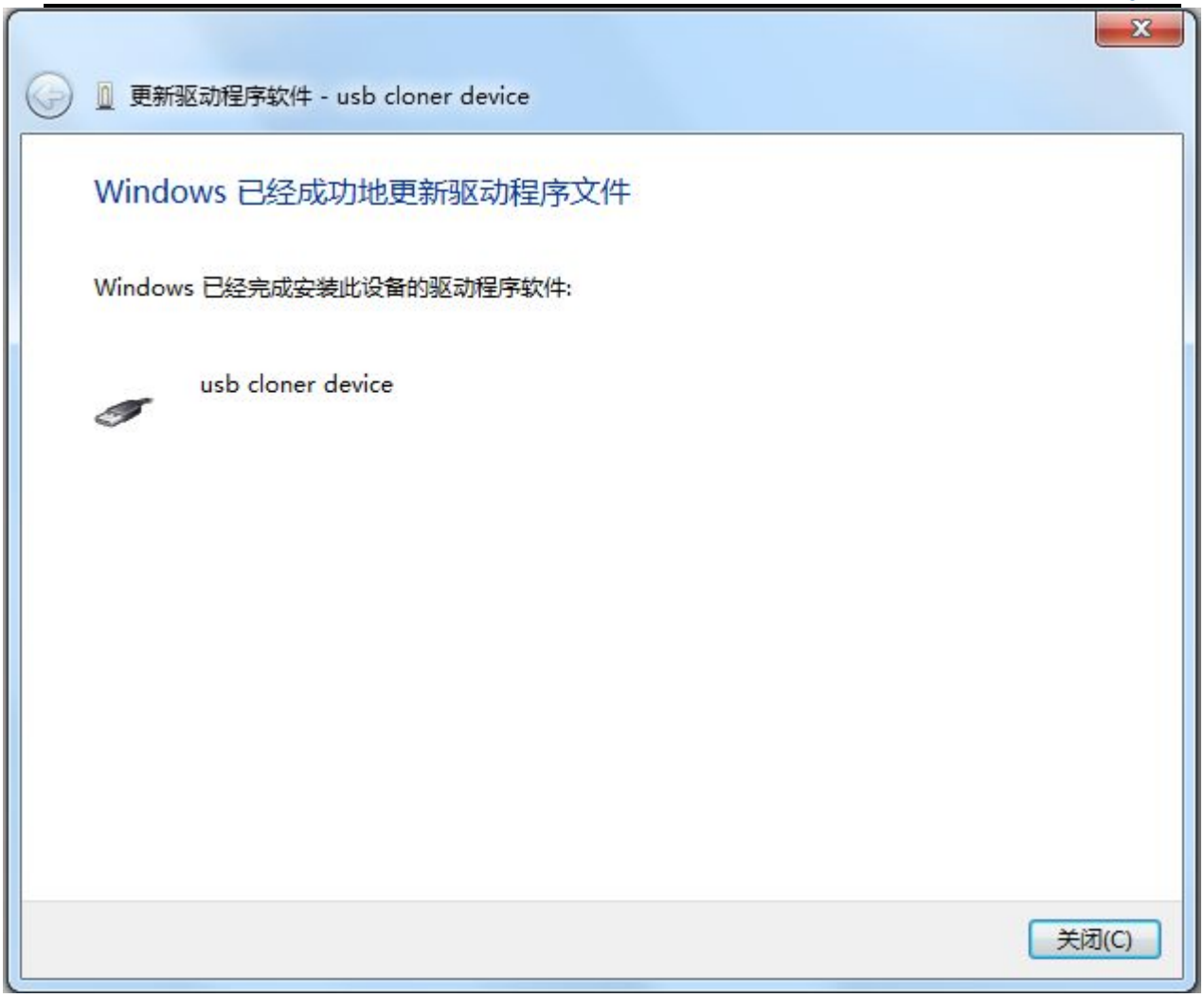


Figure 2-4 drive installation complete

Run the Burn tool

This document mainly introduce the Burn tool in Window 7 development environment using the process.

2.1 Ubuntu

Download burn kits as well as your host operating system version, extract and run.

Such as:

$ tar -zxvf cloner-x.x.x(version number)-ubuntu_release.tar.gz

$ cd cloner-x.x.x(version number)-ubuntu_release

$ ./cloner

2.2 Windows

Unzip the downloaded cloner-x.x.x(version numbe)-windows_release.zip and enter the Cloner-version numbe-Windows directory, double-click the "Cloner" run the Burn tool as in Figure 3-1.

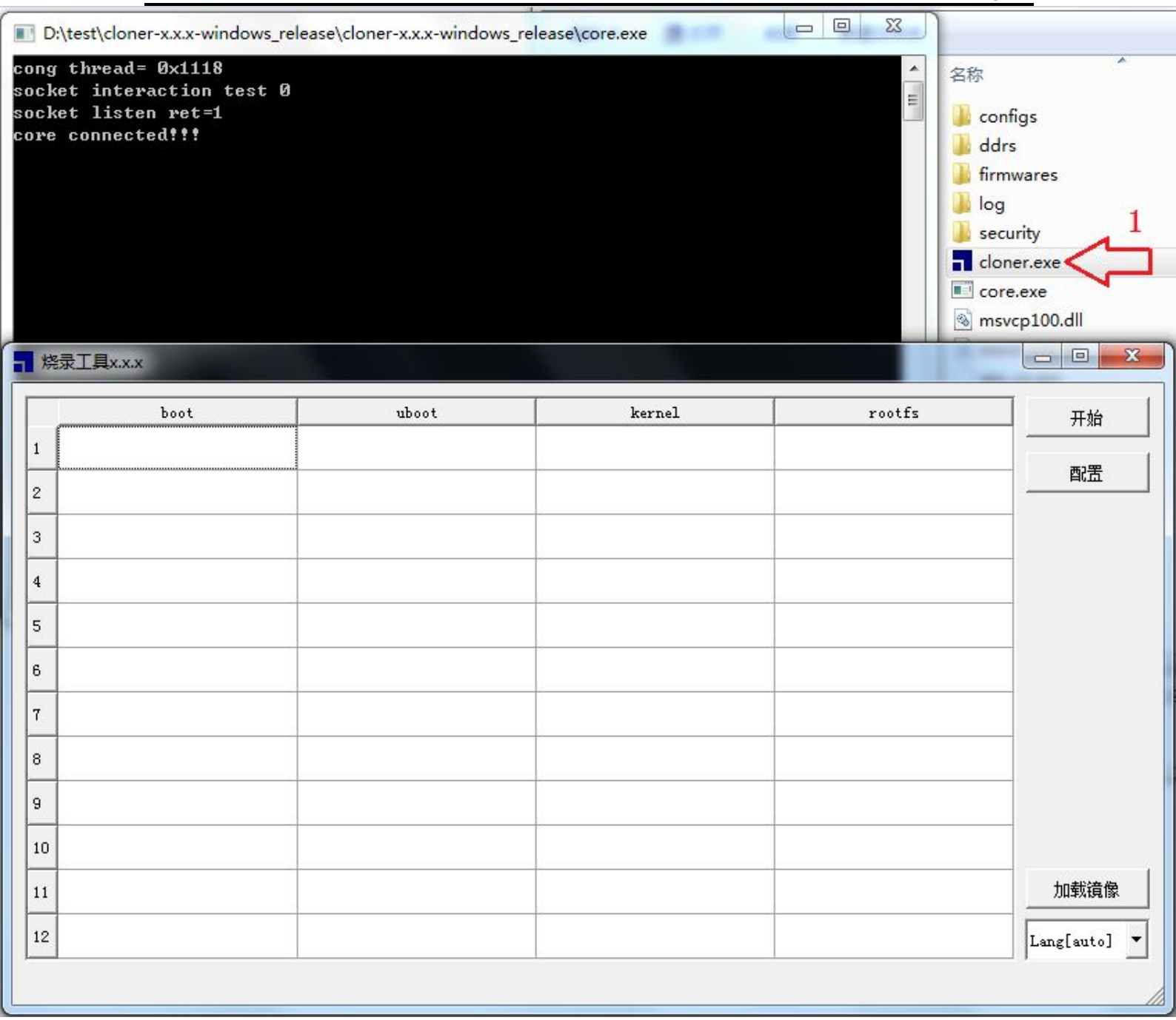


Figure 3-1 Start screen

3 Burn process

The burning tool supports all types of our company Development Board with the default configuration.When in use, select the platform and board-level according to your needs, as well as offset and file mirroring

Note: the process is based on the original default configuration. The following screenshot is only for instructions on the burning process and the areas that need attention and change, not for any development board. Use your own development board when you burn it as a reference.

3.1 Choose the platform, board configuration

Click on the "configuration" button, enter the configuration interface. In the "information" tables to select what you want to burn the **platform** and **board** support,as shown in figure 4-1.The default burning tools support USB burning mode.

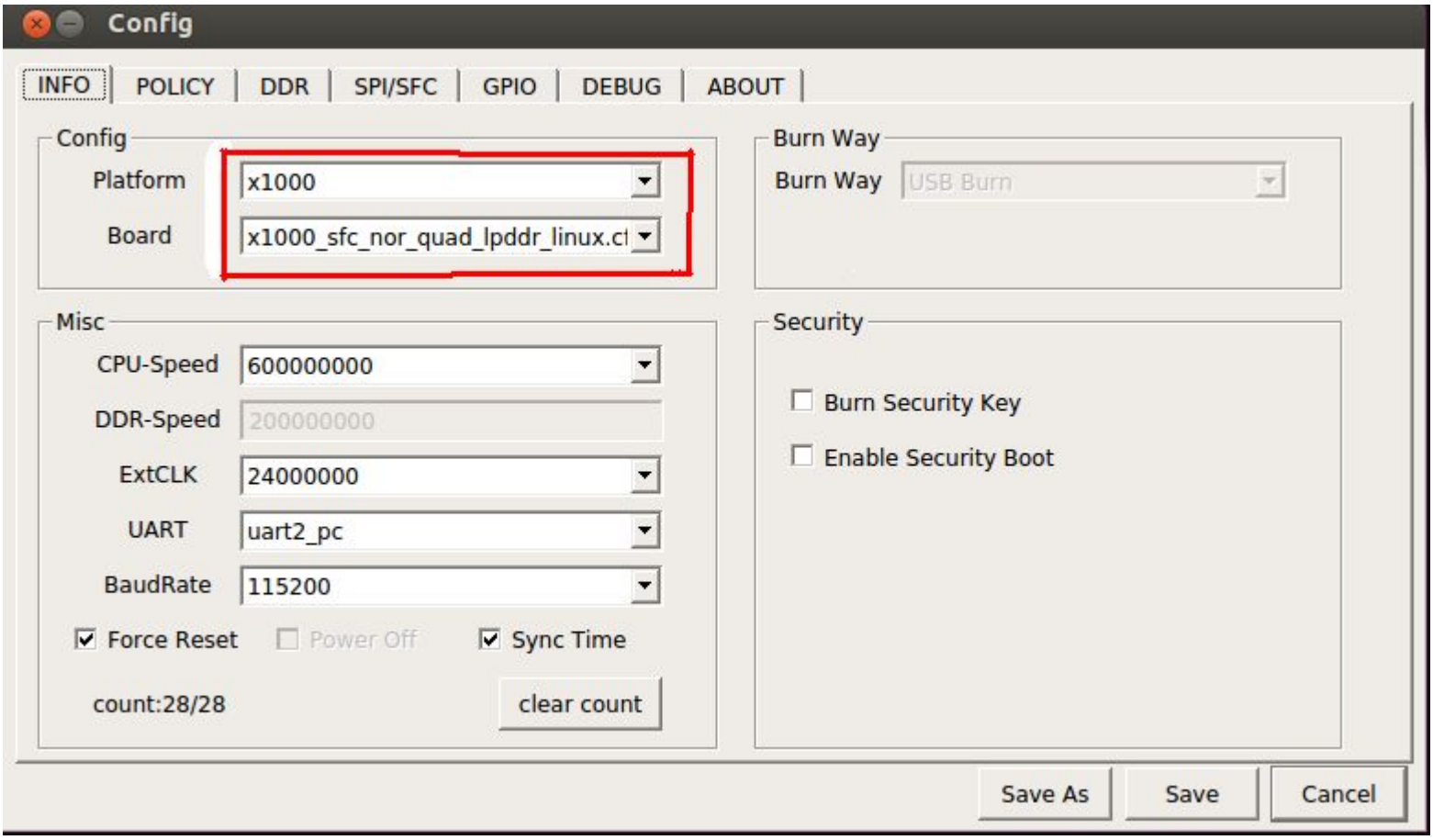


Figure 4-1 Information configuration interface

Note:

Force Reset ------System reboot after the burn is complete

Power Off ------System power off after the burn is complete(When the factory burn choose to use in more)

3.2 Modify the policy

After you choose the **Platform** and **Board**, according to your actual needs to modify the

policy.Main change burn of **offset** and **file paths**, .

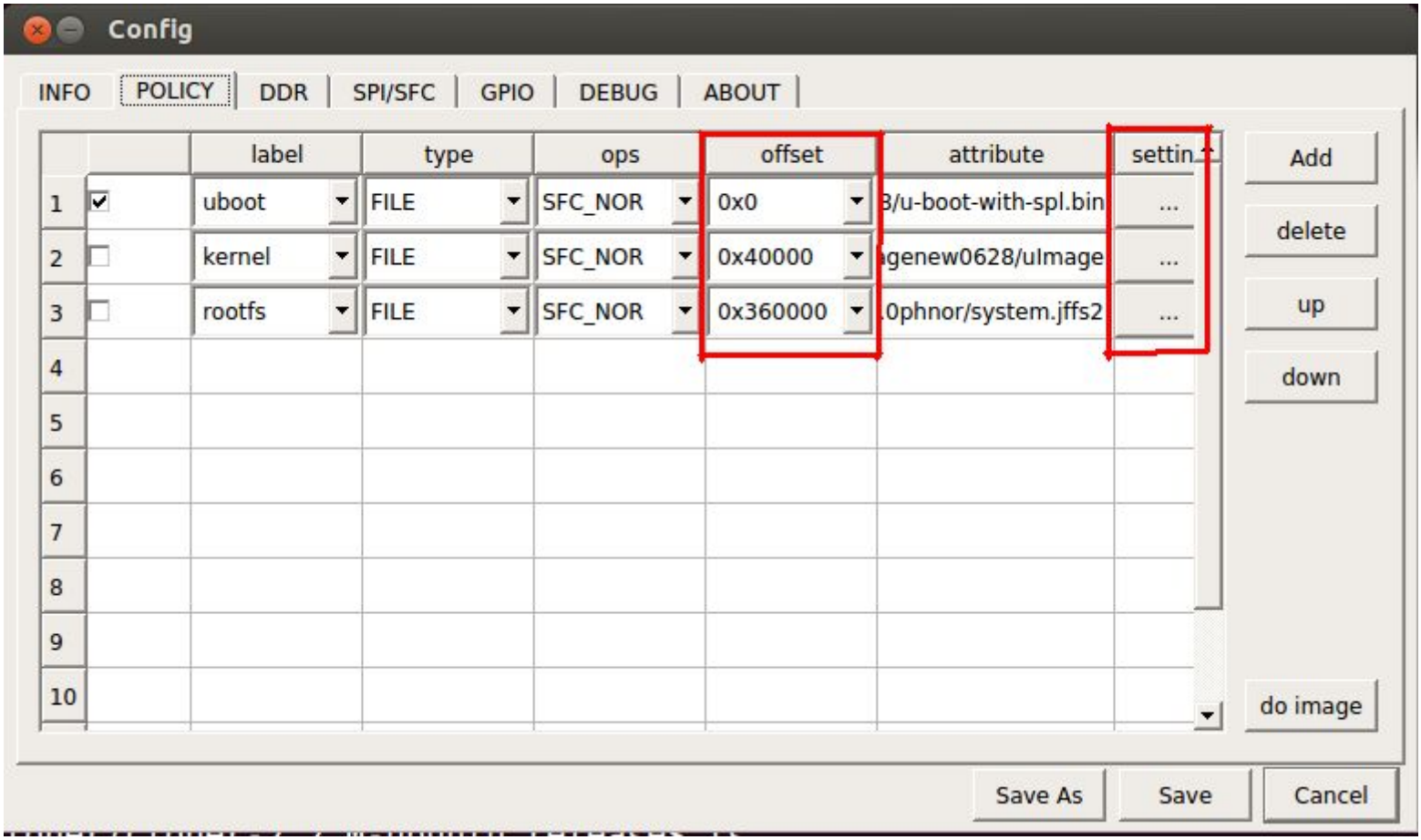


Figure 4-2 modify policy interface

Note:

Modify the offset and partition offset to the same.

When the Nand burn, should first be partitioned. Used MTD burn, the "offset" is the partition name.

3.3 Save current configurations

Policy setting is completed, click "Save" to save the current settings as in Figure 4-3.

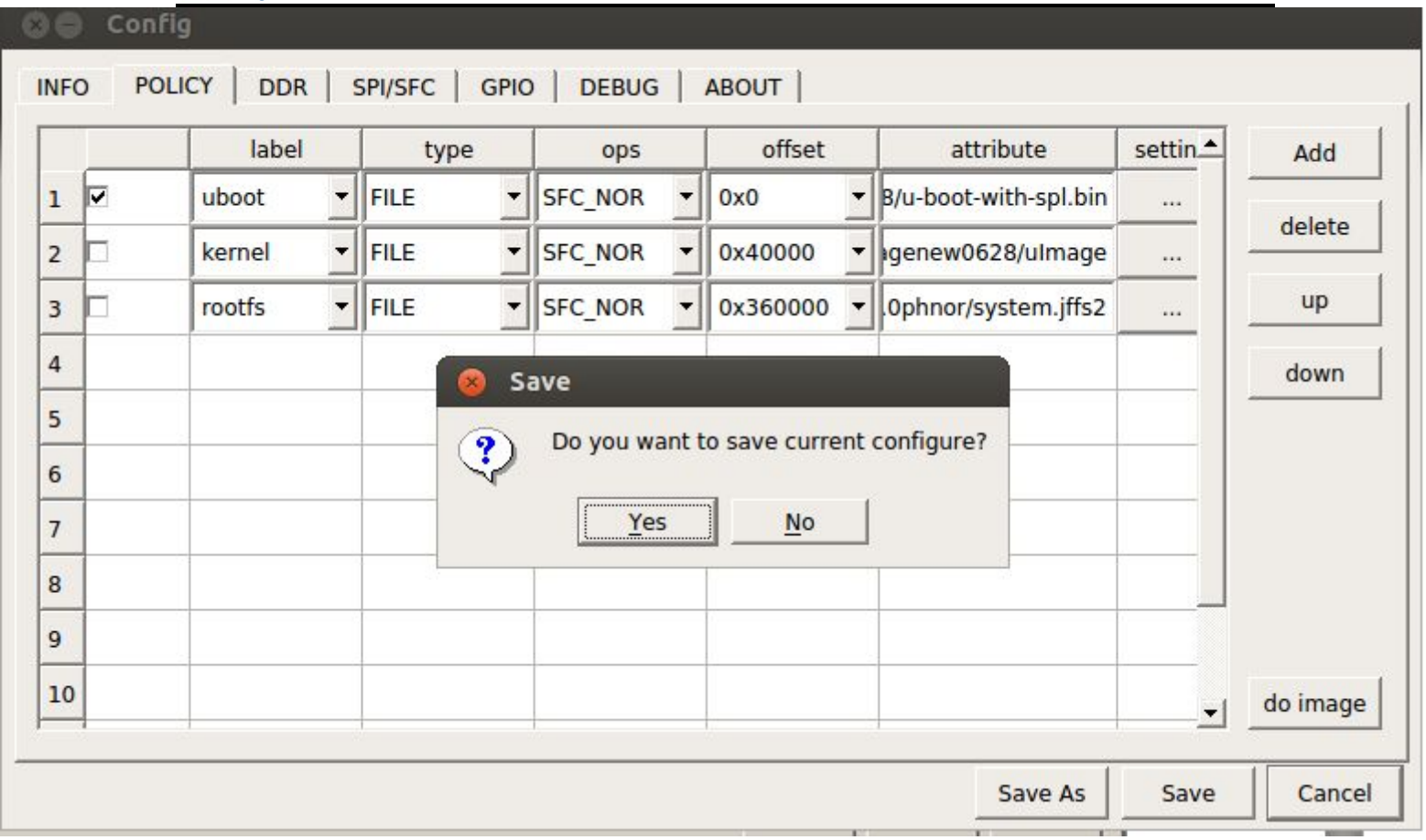
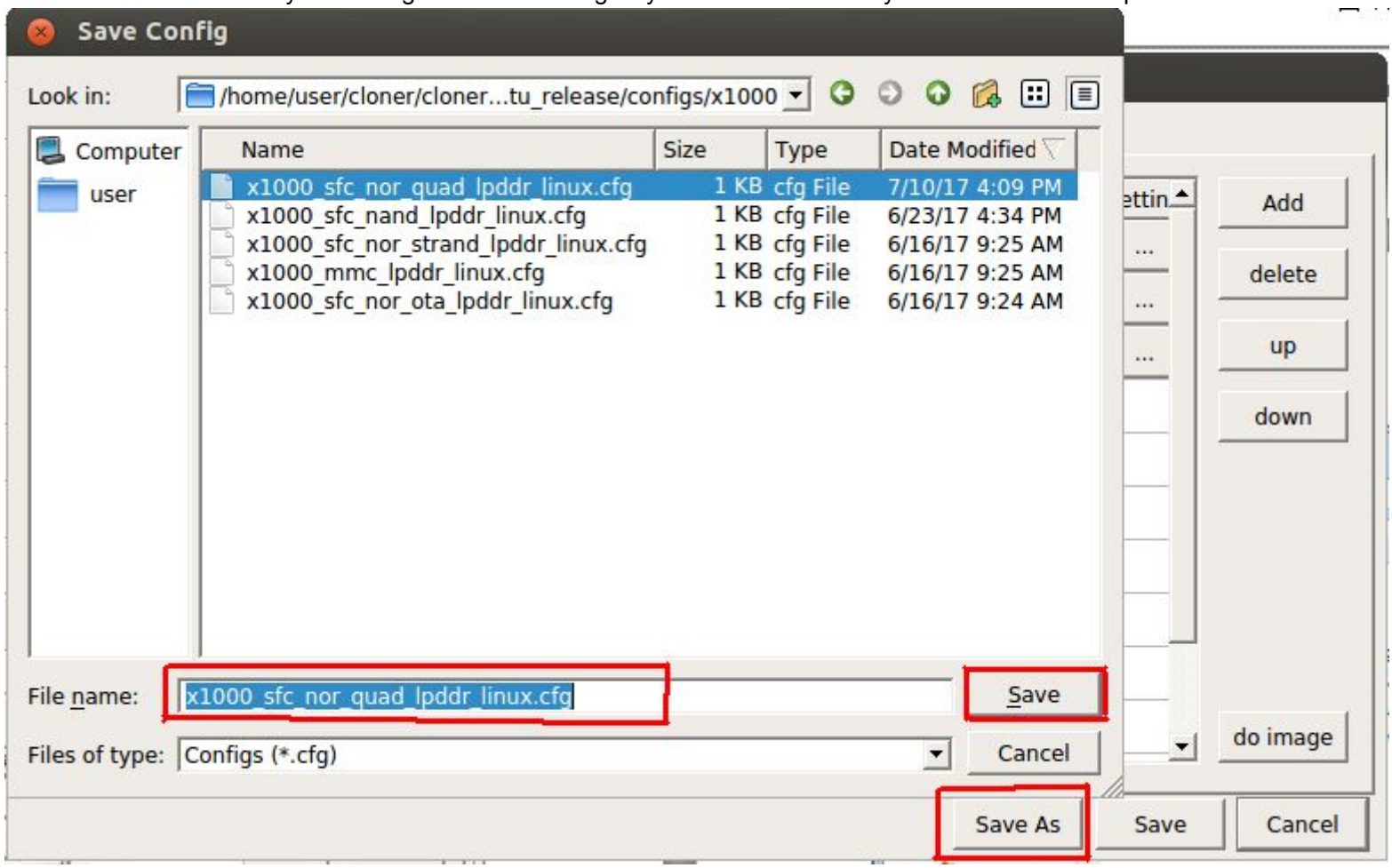


Figure 4-3 Save the current configuration

3.4 Add configurations

You modify the configuration according to your actual needs. If you do not want to replace the



default configuration, click on the "Save as" to save it as in Figure 4-4.

Figure 4-4 Save profile as

4 **B**urn sample

In the fourth chapter describes the general process of the Burn tool. Following a case of X1000 Development Board of the SFC, and introduces the use of burning tools.

4.1 Choose the platform, board configuration

Select the ' platform ' for the X1000;

Select the ' board ' for the x1000_sfc_nor_quad_lpddr_linux.cfg, as shown in Figure 5-1

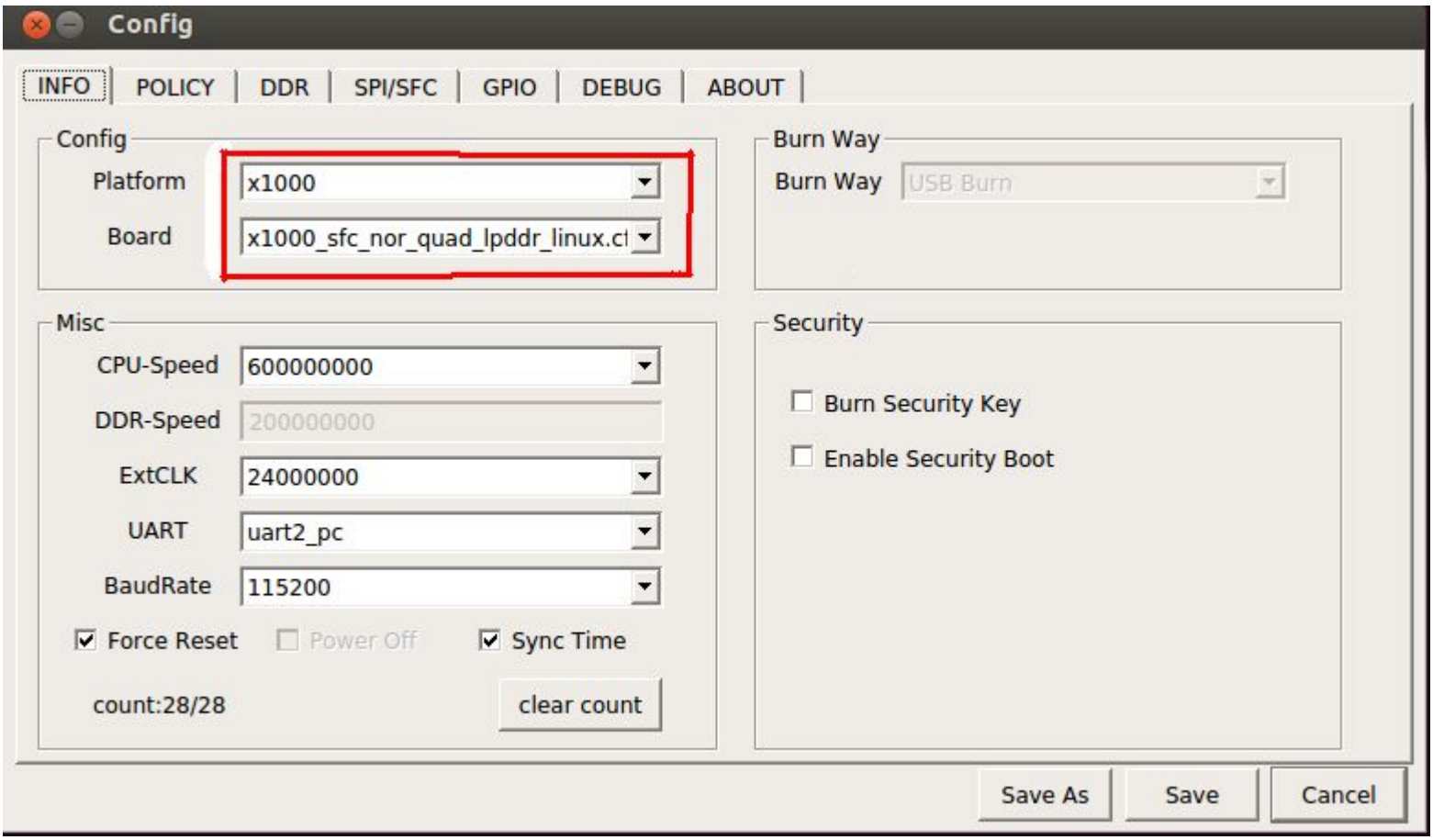


Figure 5-1 Information configuration interface

4.2 Modify the policy

Click configure in the "policy" tabs, enter the policy configuration interface as shown in Figure 5-2. Burn on burning mirrors offsets and path settings

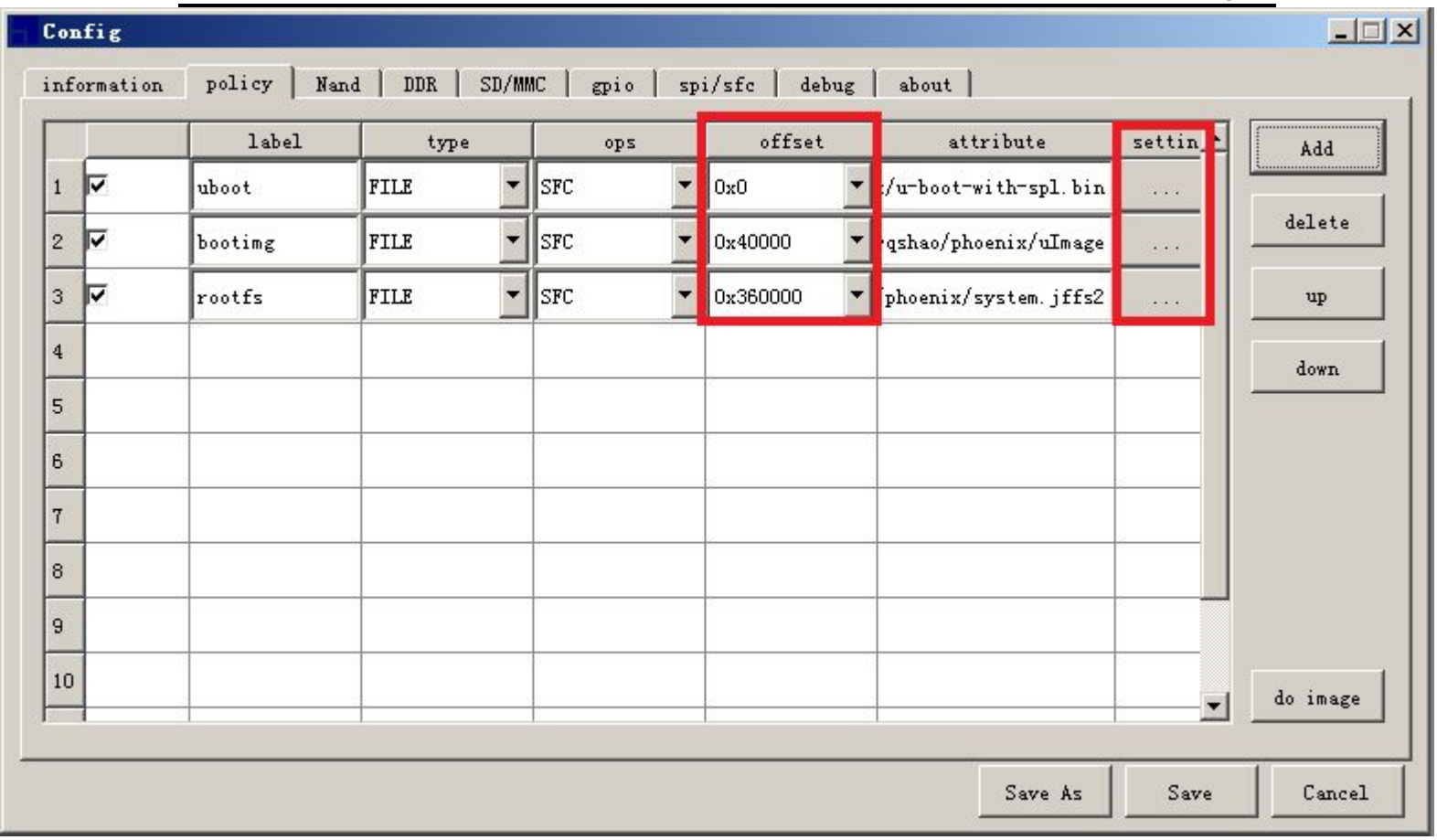


Figure 5-2 modify x1000 policy interface

Set offset:

Click on the need to modify the policy of "**offset**". Directly modify the values (hexadecimal).

Set the image path:

Click on the need to modify the policy in the "**settings**" item, pop-up interface shown in Figure 5-3, select burn image file.

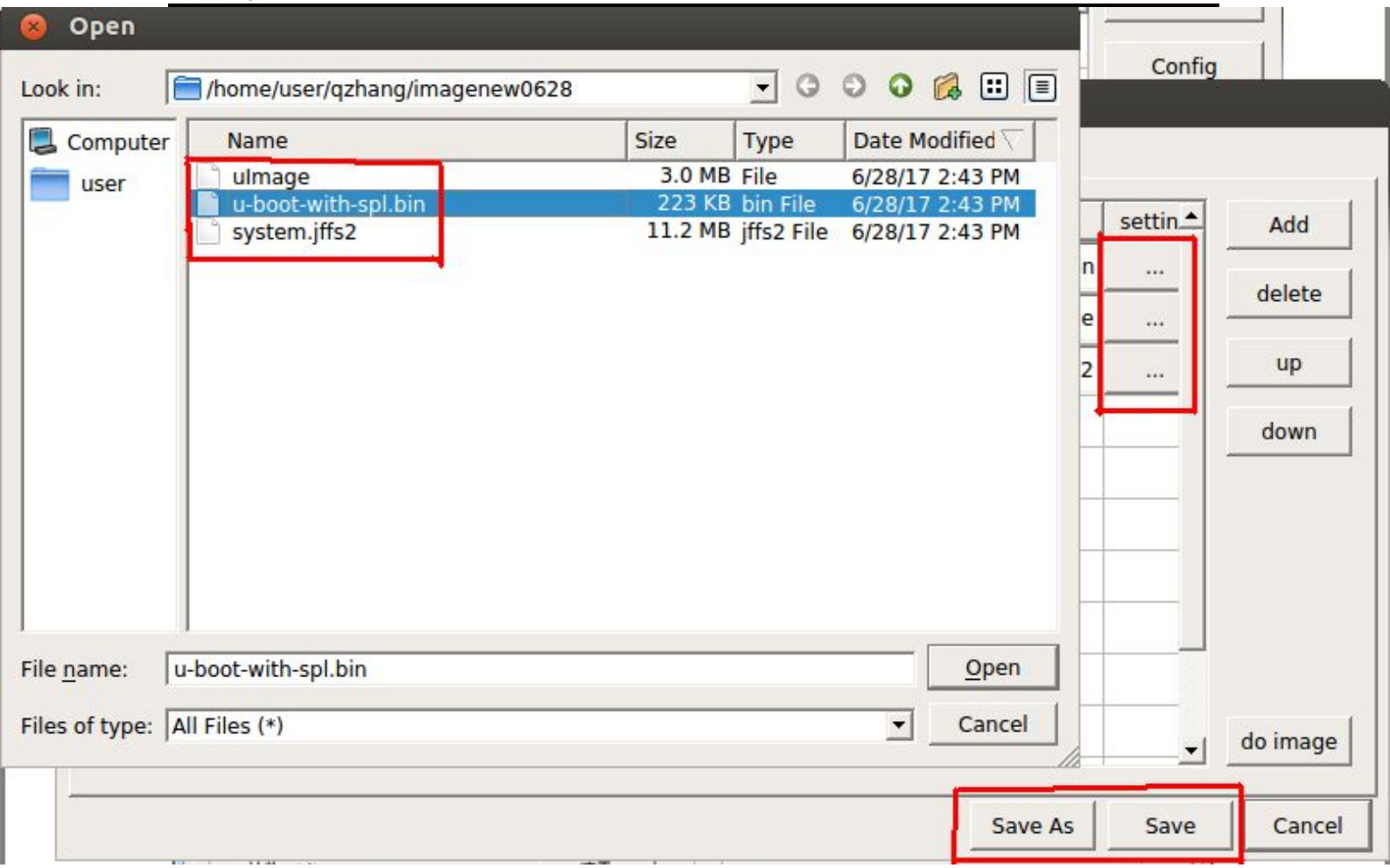


Figure 5-3 Select burn image file

4.3 Save current configurations

When you have finished setting policies, click "Save" to save the current configuration information as in Figure 5-4.

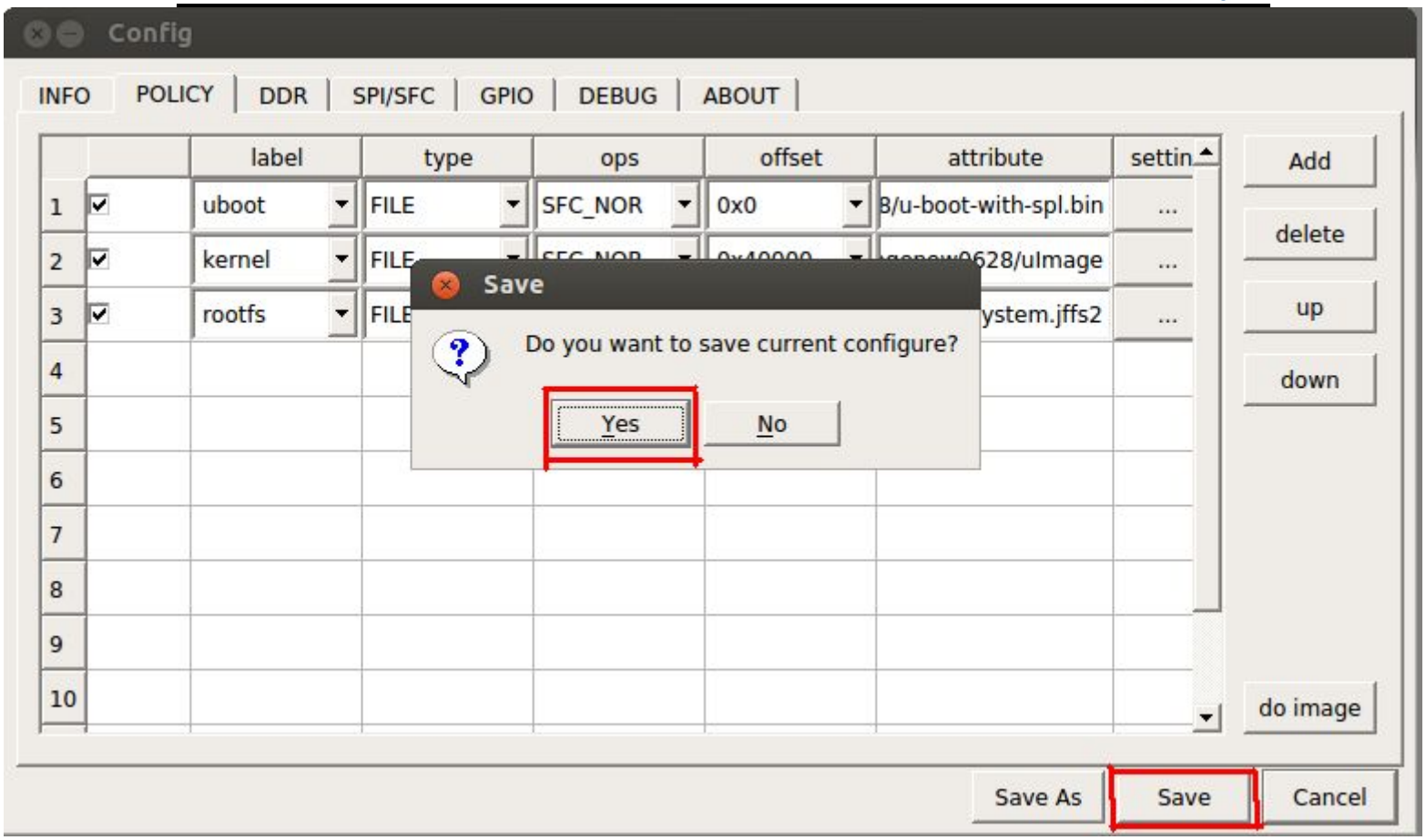


Figure 5-4 Save the configuration information

4.4 Burn

After the configuration is saved, the burning tool will return to the main interface, such as figure 3-1 and began to burn.

1. Click on **"start"** and enter the burning status.
2. Press the development board of USB burn mode button.Make development board also can burn into the burning state.

- In the process of burning all the progress bar reaches 100% buffer and complete as shown in figure 5-5.

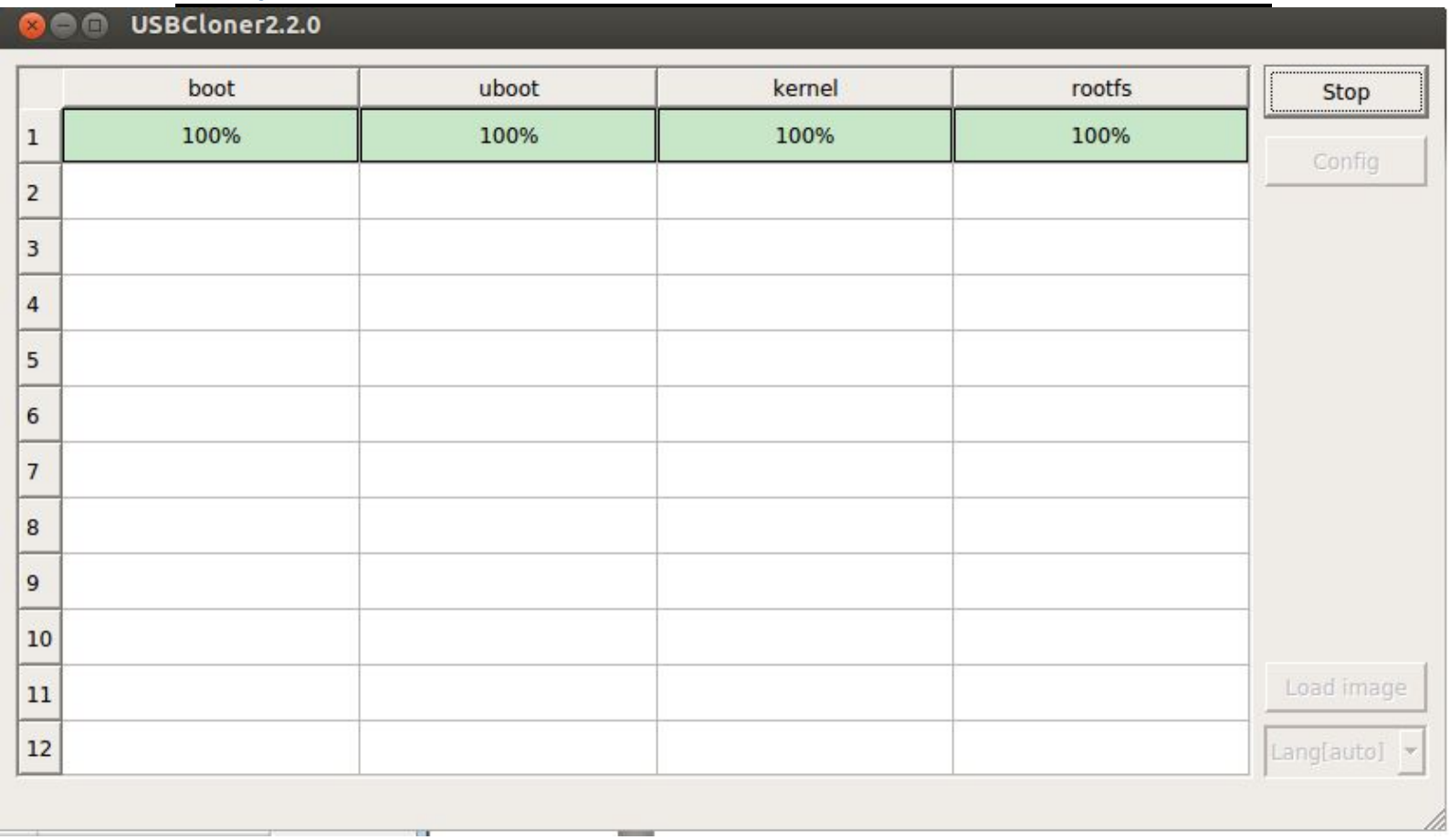


Figure 5-5 Burn completed renderings

5 FAQ

Some of the common problems and solutions.

5.1 Windows driver installation failures

If you use the Burn tool environment is Windows and install the usbcloner driver fail, please make the following checks:

1. Confirm whether development boards into the USB boot mode.
2. If it is a Window8 system and you drive in the process of installation errors, because there is no driver signature verification.You need to set the "disable driver signature enforcement" and restart the computer

If the development board driver has not been successfully installed, then open the Device Manager and whether there are any tips on our equipment, if you press the burn button, but identifies the unknown device, then you need to make sure you press the burn button correctly, and press again to burn..

5.2 Progress is shown on the main interface to 0% (under Windows)for failure

When using the Burn tool in Windows, you open the Burn tool and click on the "start" button, then presses the Development Board burn button, If the interface progress bars display is 0%, please check the Windows system there are not installed or update USBcloner driver.

5.3 Progress appears as failed Boot stage 10%

If the main screen displays the progress bar turns red and the progress to 10%.At this time, you can check the configuration in the select type of chip is consistent with the current type of chip on the board, refer to 4.1.

5.4 Progress appears as failed Boot stage 20%

If the main screen displays the progress bar turns red and the progress to 20%. At this time, you can check the configuration selection board is consistent with the current development board type, refer to 4.1.

5.5 Progress appears as failed Boot stage 40%

If the main screen displays the progress bar turns red and the progress to 40%.

- Please check the current board of DDR and DDR type of burner in the current configuration is consistent.
- If the same, please check the burn tool to configure DDR chip select,banks and bus width are correct.
- If these parameters are correct, please check row, col as well as the value of the row1,col1 parameter is configured correctly.
- If the values are correct, then check the burn tool for the configuration of CPU and DDR frequency is too high or too low.
- Basic rule: DDR3 frequency should not be lower than 150M, LPDDR and LPDDR2 frequencies should not exceed 200M.

(the frequency range used only to burner configuration, uboot frequency range is not discussed).

- Specific methods of checking and modifying the configuration, please refer to the Guide for using the Burn tool.

5.6 Progress appears as failed Boot stage 50%, 70%, 75%

If the main screen displays the progress bar turns red and the progress to 50% or 70% or 75% .Then check the DDR configuration.If DDR configurations are correct, then check the USBcloner operating environment whether an identified USB virtual machine.

5.7 Progress appears as failed Boot stage 85%

If the main screen displays the progress bar turns red and the progress to 85%. Please confirm whether the burned media is NAND.

- If you are NAND, check current NAND type is configured in the Burntool, if you have already configured, please check its parameters arecorrect.
- Some of the parameters are incorrect please check NAND partition isconfigured correctly.
- Specific methods of checking and modifying the configuration, pleaserefer to the Guide for using the Burn tool.

5.8 Progress appears as failed Boot stage 100%，But burning files by 0%

When using a burning tool to burn, if the progress bar is displayed on the main interface to 100%, but the progress bar shows image file is 0%and displayed on the progress bar "INIT_FAILED". At this time, was sure to check burn file path configuration is correct, the path here refers to the PC directory and file name are correct.

5.9 Other errors

Use the Burn tool, if you meet the above does not mention the error or the error according to the above method is not resolved, you can contact our technical support staff at any time.