WF88 FW Update Guide

Amp’ed RF Technology, Inc.

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1. USBcloner burning tool

USBcloner burning tool is a burning tool for WF88 module. This document will introduces the driver installation process, burning steps. Please read this document before operation to avoid unnecessary issues.

1.1. Operating environment support

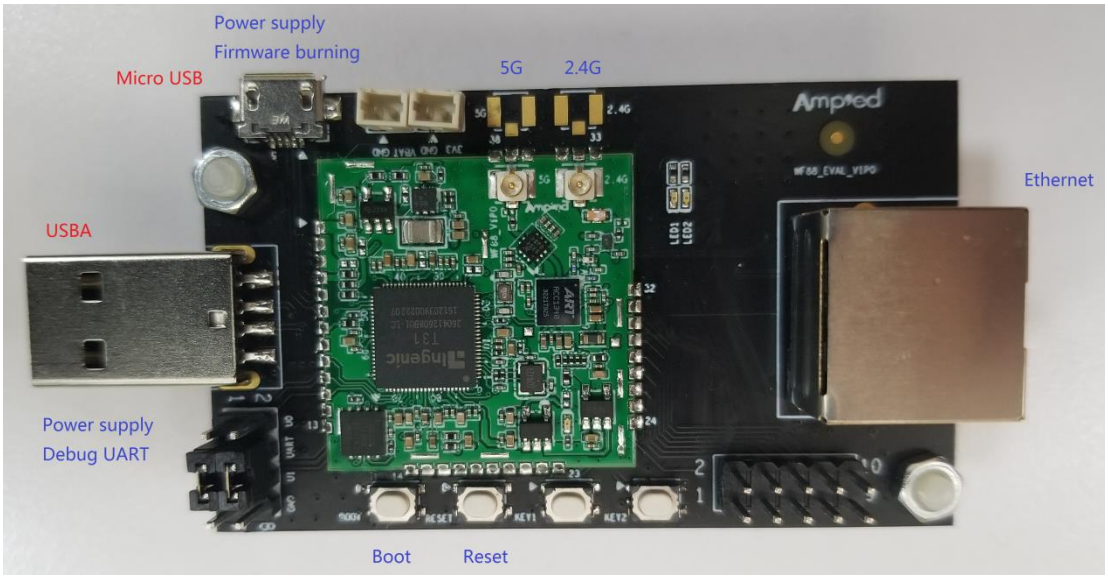
USBCloner environment requirements as follows:

Windows XP, Win7 and above (32bit, 64bit)

1.2. Burn tool package

The version for Windows is found in WF88_Firmware_xxxx.rar. Unzip this compressed package.

1.3. Evaluation board



The WF288 is the evaluation board for the WF88 module, and contains the following features:

- Micro USB: firmware update interface and power supply.
- USBA: debugging and serial comm port interface and alternative power supply.
- Boot: boot button for firmware update.
- Reset: system reset button.
- Ethernet interface.

Note: either the Micro USB or USBA can supply power to the board. Both may be used at the same time.

1.4. Prepare download cable

Prepare a download cable from USBA to micro USB, which is a four core cable that includes power, ground, and USB_DP, and USB_DM.

2. Install driver

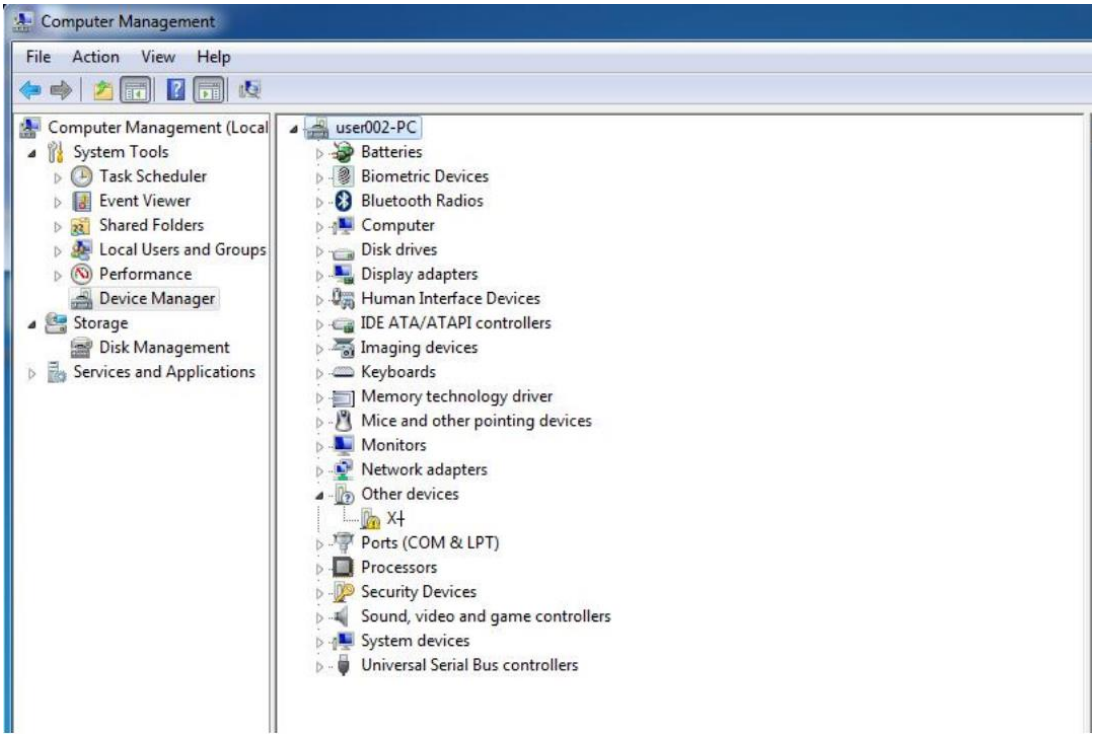
This section will discuss introduce installation on Windows 7, and there maybe differences when using other windows versions. Users should disable Secure Boot under UEFI and disable the driver mandatory signature on Windows 10. Users can easily find the detailed instructions online.

2.1. Download mode

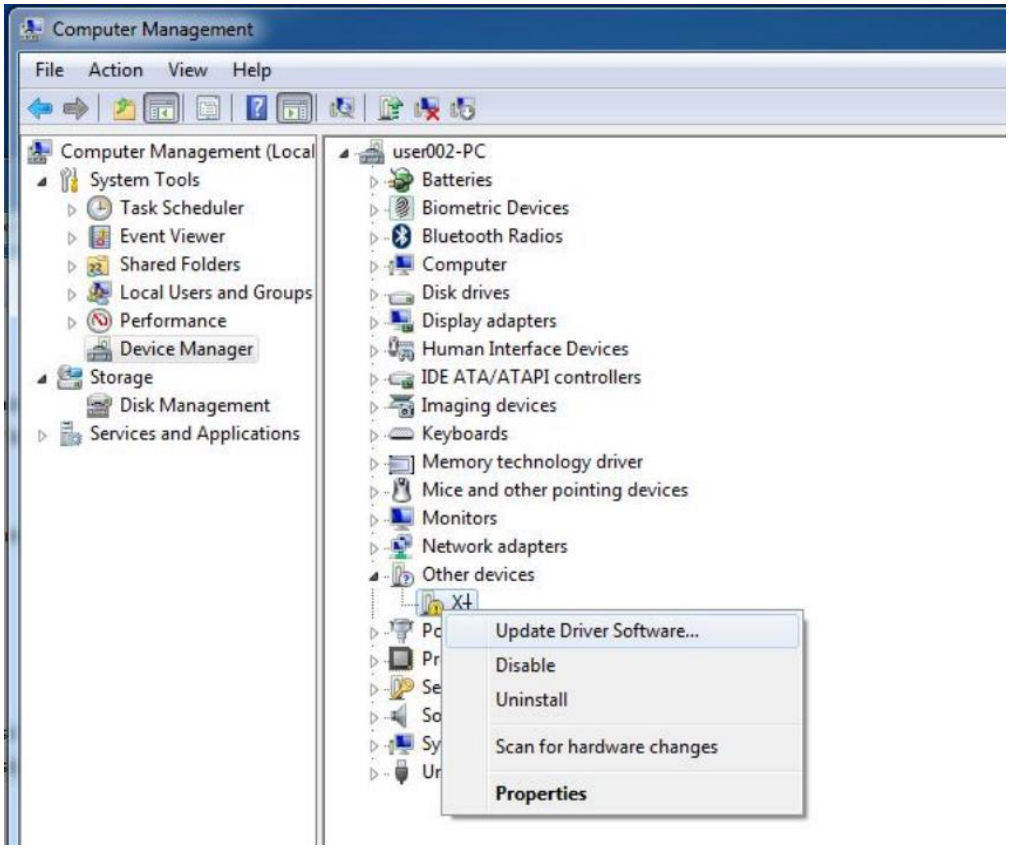
Insert the USBA of the download cable into the USB interface of the PC, press the "Boot" button on the evaluation board and do not release it. At the same time, insert the micro USB interface of the download cable into the "Micro USB" interface of the evaluation board, and then release the "Boot" button to enter the download mode.

2.2. Installation

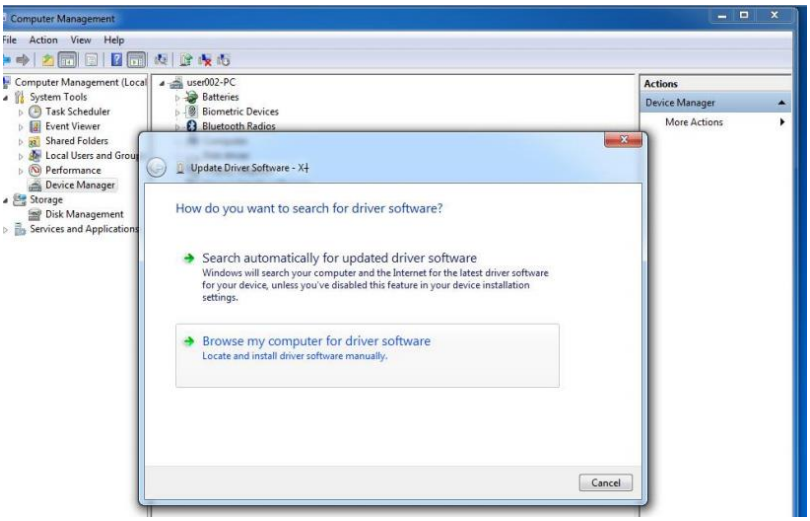
Make sure WF88 module enters the download mode. Then the desktop will pop up a dialog with an installation wizard, or users can also check the device manager as shown in the figure below:



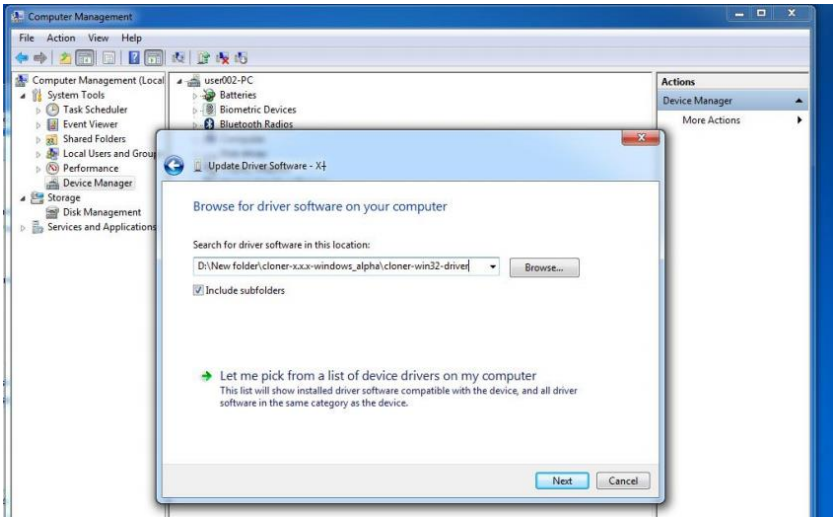
Right click on this unknown device and select “update driver software” as shown below:



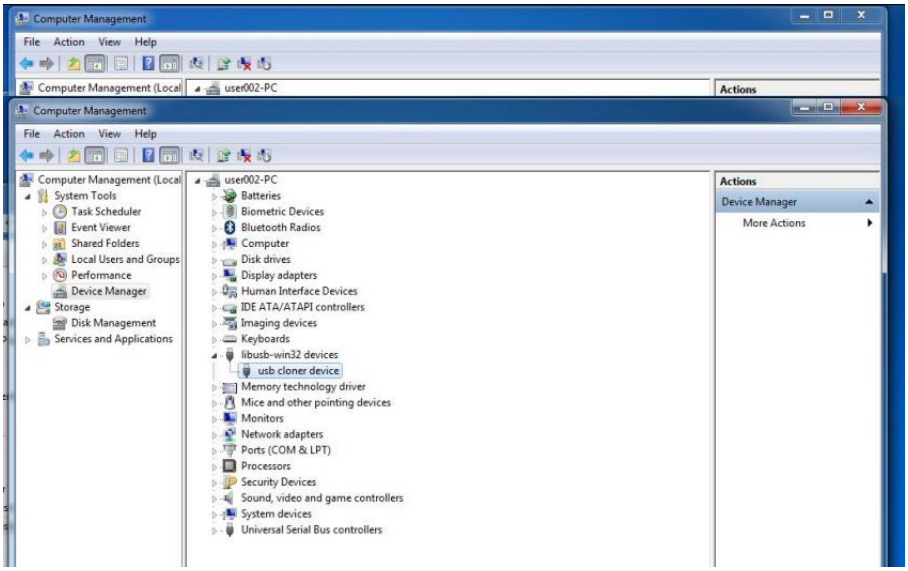
Select “browse my computer for driver software”.



Then enter the cloner-win32-driver directory in the path (under the directory “clone win32 driver”).



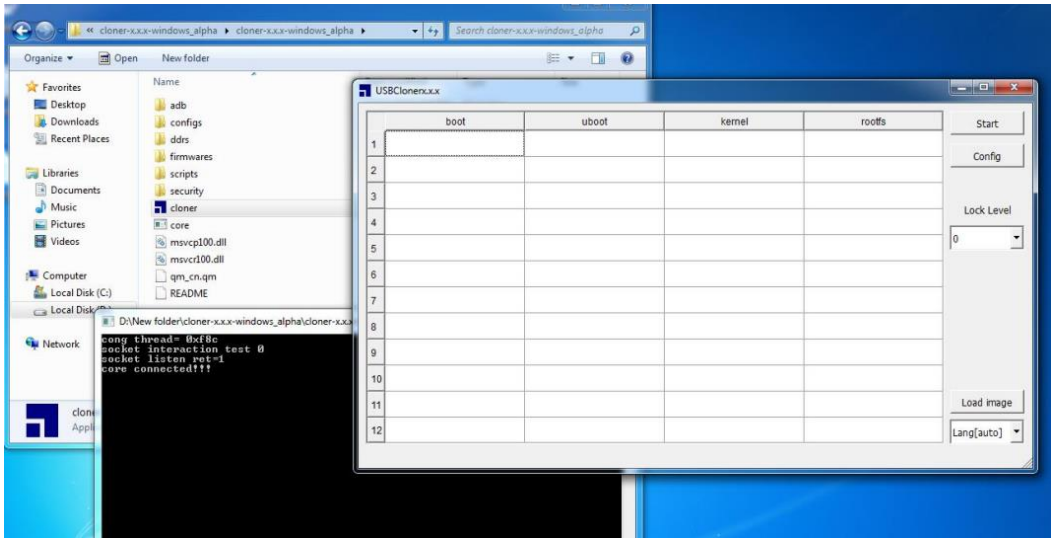
Then click “next” and “yes” to start the installation:



3. Run the burn tool

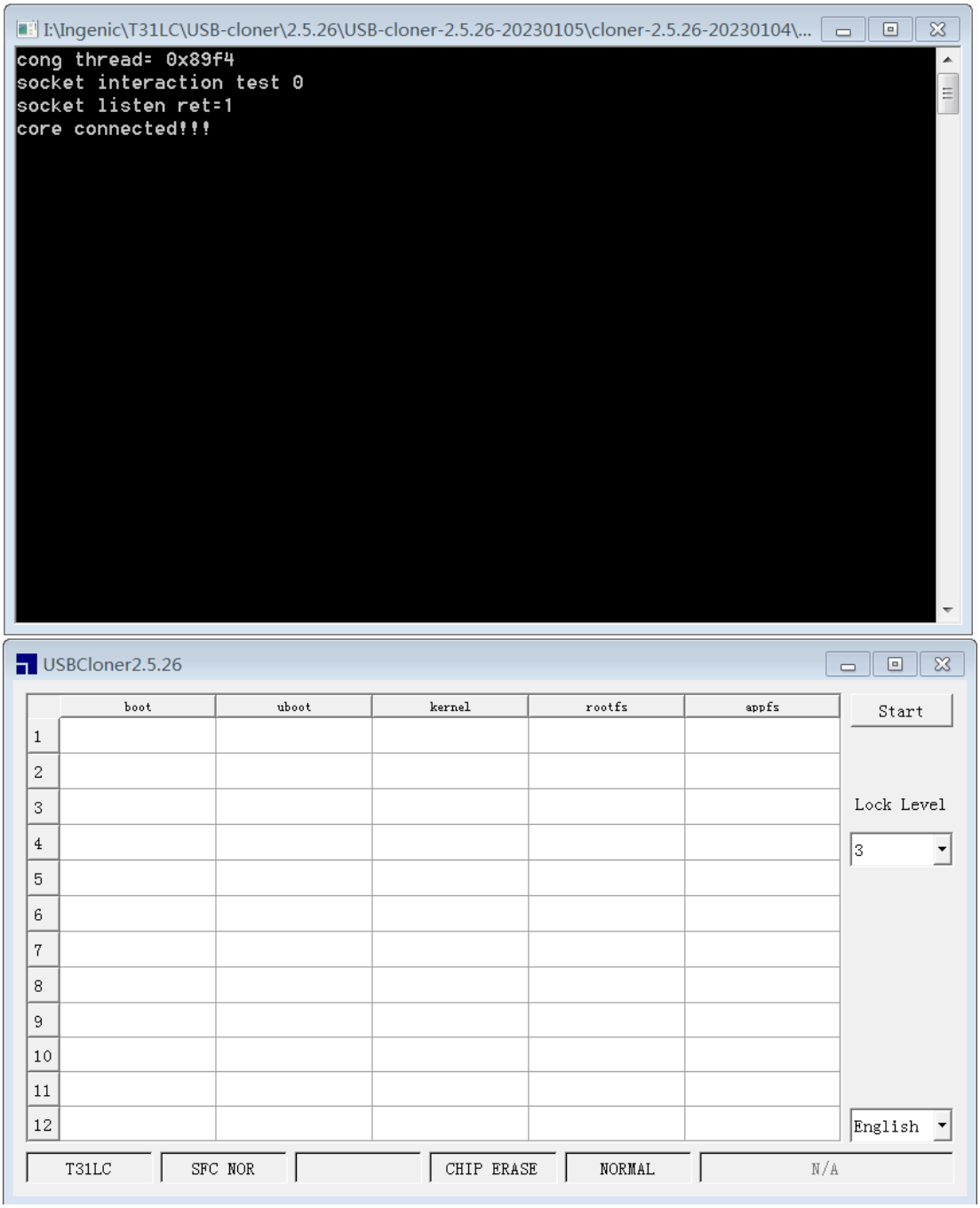
3.1. Start the USBCloner on Windows

Go to the directory, cloner-2.5.26-windows, where the cloner is located, then double click cloner.exe to start the burn tool. The operating interface will pop up as shown below:

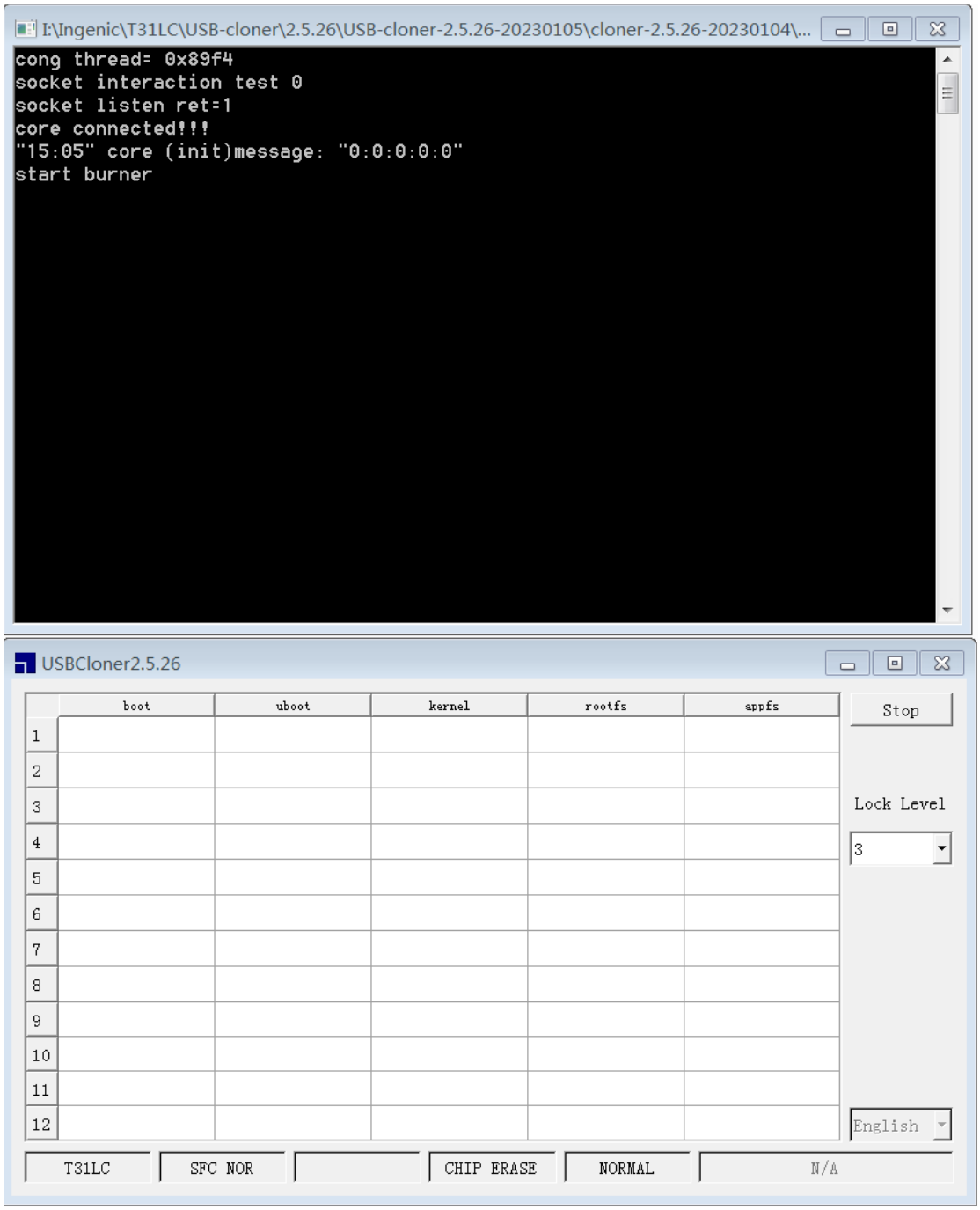


4. Burning process

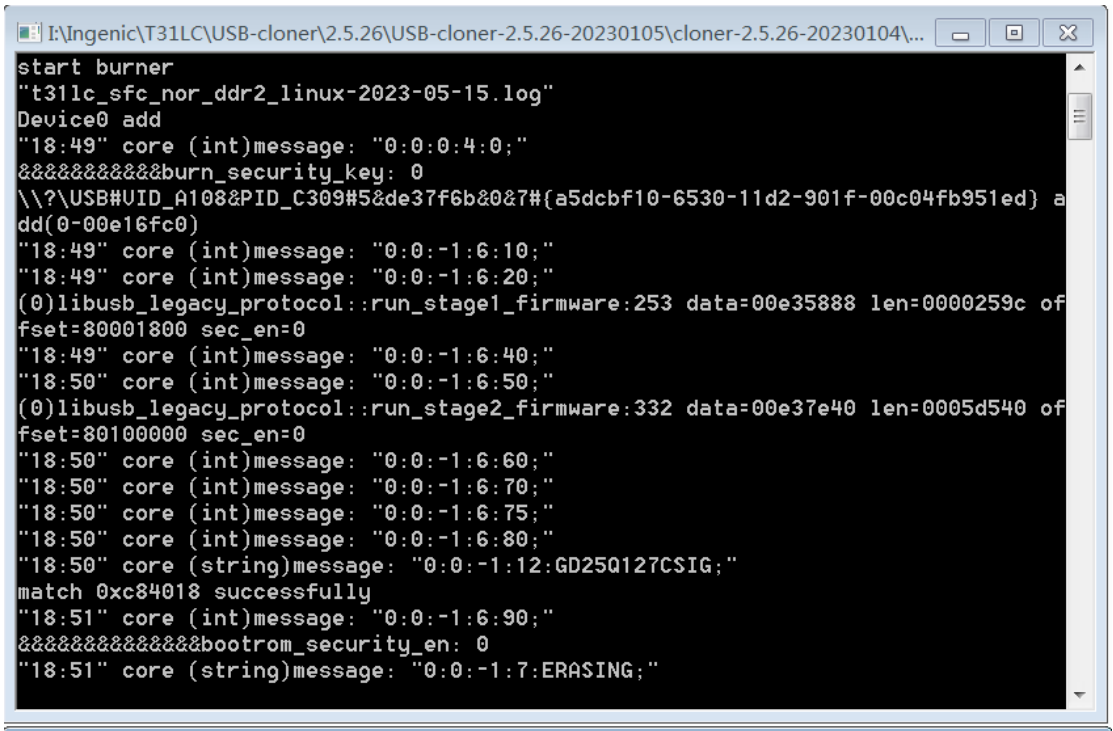
4.1. Start the USBCloner tool.

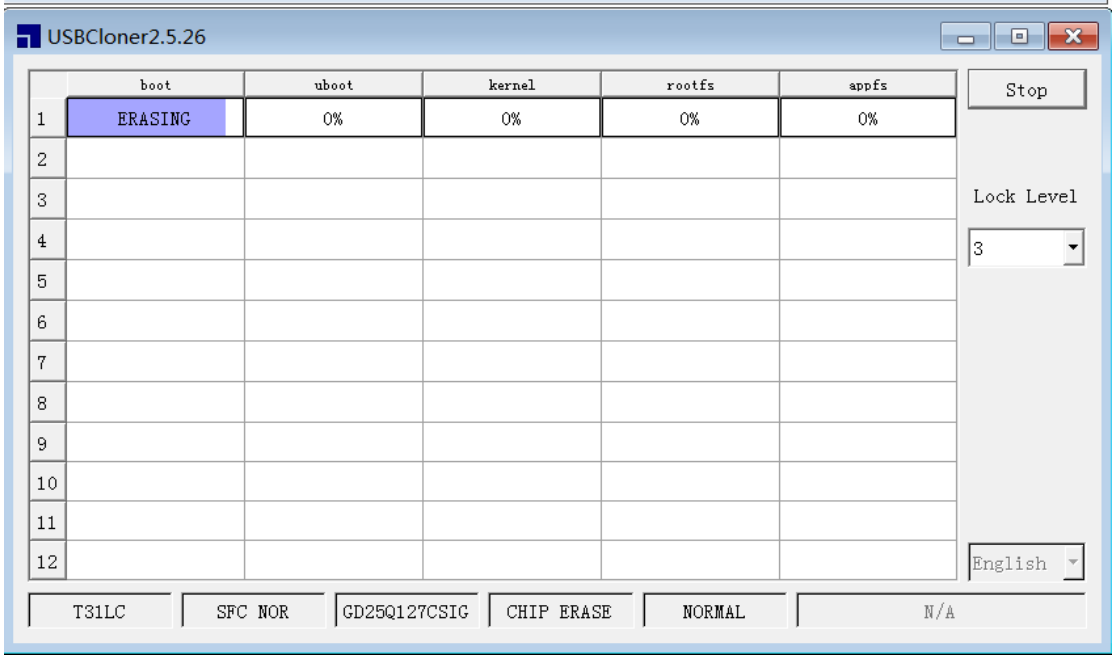

I:\Ingenic\T31LC\USB-cloner\2.5.26\USB-cloner-2.5.26-20230105\cloner-2.5.26-20230104\...
cong thread= 0x89f4
socket interaction test 0
socket listen ret=1
core connected!!!
USBCloner2.5.26
boot
uboot
kernel
rootfs
appfs
Start
Lock Level
3
English
T31LC
SFC NOR
CHIP ERASE
NORMAL
N/A

4.2. Click on the "Start" button.

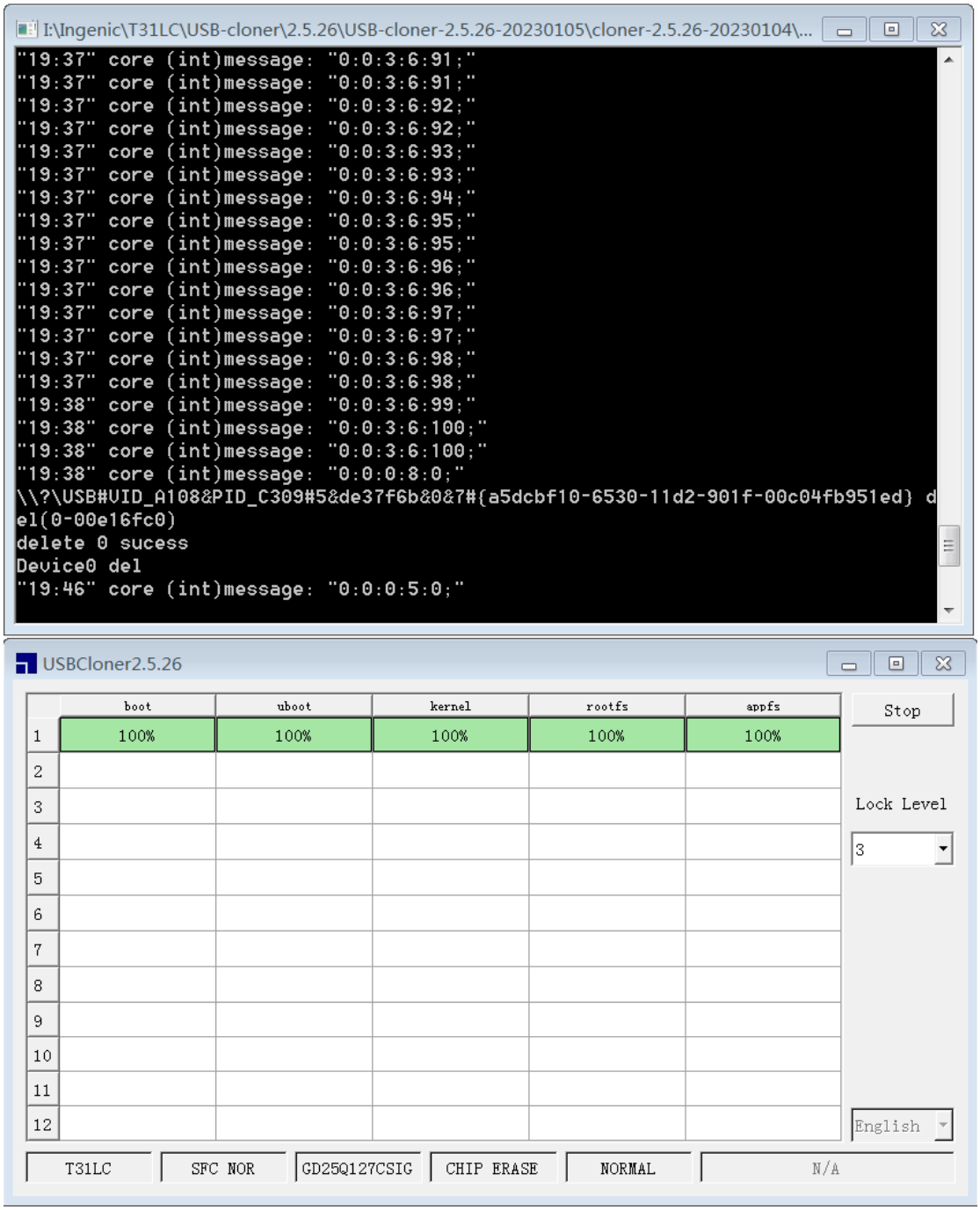


4.3. Follow the instructions in "2.1 Enter the download mode" above. Make sure WF88 module is in download mode. After entering the download mode, start downloading the firmware:





4.4. Then wait until all the burning tool's progress bars reach 100% and it's then complete.



5. Revision History

Date	Revision	Description
22, May, 2023	1.0	Initial version