

# ***Linux CplSPTool User Manual***

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## Document Version List

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## Introduction

This document is the user guide of Linux CpISPTool.

## 1. Tool User Guide

### 1.1 Introduction of Tool architecture

CpISPToo\_V1.0.0\_X64.tar.gz is CpISPTool for 64 bit system.

CpISPToo\_V1.0.0\_X86.tar.gz is CpISPTool for 32 bit system.

### 1.2 How to use Tool

User needs to select the corresponding Tool package according to the current system. This example is using 64 bit system.

1> Copy CpISPToo\_V1.0.0\_X64.tar.gz to the directory on the system 【 For example :  
/home/user 】.

2> Unzip CpISPToo\_V1.0.0\_X64.tar.gz, and into the unzip directory.

User need create a new folder (For example : test) on the unzip folder  
(CpISPToo\_V1.0.0\_X64), and copy FW (.bin) to the new folder.

```
mm1sd@mm1sd-Dell-System-Vostro-3450:~$ tar -xvf CpISPTool_V1.0.0_x64.tar.gz
CpISPTool_V1.0.0_x64/
CpISPTool_V1.0.0_x64/VerifyRet.txt
CpISPTool_V1.0.0_x64/libComm.so
CpISPTool_V1.0.0_x64/Comm/
CpISPTool_V1.0.0_x64/Comm/libRslcdTypeCUsb.so
CpISPTool_V1.0.0_x64/Comm/libRTUsb.so
CpISPTool_V1.0.0_x64/Comm/libHub2IIC.so
CpISPTool_V1.0.0_x64/Flash.dat
CpISPTool_V1.0.0_x64/IspLog.txt
CpISPTool_V1.0.0_x64/rs_digital_sign
CpISPTool_V1.0.0_x64/libIsp.so
CpISPTool_V1.0.0_x64/ISPTool
mm1sd@mm1sd-Dell-System-Vostro-3450:~$ cp -r test CpISPTool_V1.0.0_x64
mm1sd@mm1sd-Dell-System-Vostro-3450:~$ cd CpISPTool_V1.0.0_x64/
mm1sd@mm1sd-Dell-System-Vostro-3450:~/CpISPTool_V1.0.0_x64$
```

3> Modify file execution authority

Run `chmod -R 777 *` to get the Write authority.

If the red area is `rwX`, user don't need to run `chmod` command again, please skip to next step

```
mm1sd@mm1sd-Dell-System-Vostro-3450:~/CpISPTool_V1.0.0_x64$ ls -l
总用量 6500
drwxr-x--x 2 mm1sd mm1sd 4096 2月 19 16:06 Comm
-rwxr-x--x 1 mm1sd mm1sd 12329 2月 19 16:06 Flash.dat
-rwxr-x--x 1 mm1sd mm1sd 1288 2月 19 17:09 IspLog.txt
-rwxr-x--x 1 mm1sd mm1sd 855272 2月 19 16:06 ISPTool
-rwxr-x--x 1 mm1sd mm1sd 1163600 2月 19 16:06 libComm.so
-rwxr-x--x 1 mm1sd mm1sd 1522208 2月 19 16:06 libIsp.so
-rwxr-x--x 1 mm1sd mm1sd 3072576 2月 19 16:06 rs_digital_sign
drwxr-x--x 2 mm1sd mm1sd 4096 2月 19 17:06 test
-rwxr-x--x 1 mm1sd mm1sd 4 2月 19 17:08 VerifyRet.txt
mm1sd@mm1sd-Dell-System-Vostro-3450:~/CpISPTool_V1.0.0_x64$ chmod -R 777 *
mm1sd@mm1sd-Dell-System-Vostro-3450:~/CpISPTool_V1.0.0_x64$ ls -l
总用量 6500
drwxrwxrwx 2 mm1sd mm1sd 4096 2月 19 16:06 Comm
-rwxrwxrwx 1 mm1sd mm1sd 12329 2月 19 16:06 Flash.dat
-rwxrwxrwx 1 mm1sd mm1sd 1288 2月 19 17:09 IspLog.txt
-rwxrwxrwx 1 mm1sd mm1sd 855272 2月 19 16:06 ISPTool
-rwxrwxrwx 1 mm1sd mm1sd 1163600 2月 19 16:06 libComm.so
-rwxrwxrwx 1 mm1sd mm1sd 1522208 2月 19 16:06 libIsp.so
-rwxrwxrwx 1 mm1sd mm1sd 3072576 2月 19 16:06 rs_digital_sign
drwxrwxrwx 2 mm1sd mm1sd 4096 2月 19 17:06 test
-rwxrwxrwx 1 mm1sd mm1sd 4 2月 19 17:08 VerifyRet.txt
mm1sd@mm1sd-Dell-System-Vostro-3450:~/CpISPTool_V1.0.0_x64$
```

## 4> Run FW Update Command

### 4.1 Program boot bin file (boot.bin is a FW file name example)

```
sudo .  
./ISPTool --isp  
--fw ./boot.bin  
--bank 0  
--comm 11  
--ver --flash
```

```
localhost /usr/local/tmp/ISP/CpISPTool_V1.0.0_20190308 # ./ISPTool --isp --fw ./Boot.bin --bank 0 --comm 11 --ver --flash  
Realtek Linux ISP Utility V1.0.0 (C) 2019  
Flash Name: W25Q80  
ISP Progress: 100%  
ProjectID: 0x3ff  
FWVersion: 0x01  
FWSubVersion: 0x01  
Success
```

### 4.2 Program User bin file (user.bin is a FW file name example)

```
sudo ./ISPTool --ispuser  
--fw ./user.bin  
--bank 4  
--flagaddr 0x4F8FE  
--comm 11  
--ver --reg
```

```
localhost /usr/local/tmp/ISP/CpISPTool_V1.0.0_20190308 # ./ISPTool --ispuser --fw ./User.bin --bank 4 --flagaddr 0x4F8FE --comm 11 --ver --reg  
Realtek Linux ISP Utility V1.0.0 (C) 2019  
Flash Name: W25Q80  
ISP Progress: 100%  
ProjectID: 0x3ff  
FWVersion: 0x01  
FWSubVersion: 0x02  
Success  
localhost /usr/local/tmp/ISP/CpISPTool_V1.0.0_20190308 #
```

## 1.3 Command and Parameters

| Command | Parameters | Describe   | Example(Blue part is option, others are required) |
|---------|------------|--|---|
| isp     | No         | Program Normal FW  | --isp --fw xxx                                    |
| ispuser | No         | Program User FW of Flash Partition<Boot+User>                      | --ispuser --fw xxx                                |
| comm    | 11         | Setting communication channel:<br>11: DeviceI2C                    | --comm 11   |
| ver     | Read mode  | flash: Read FW version from flash<br>reg: Read FW version from reg | --ver --flash<br>--ver --reg                      |
| fw      | fw path    | Specify the FW file. File path supports                            | --fw xxx.bin                                      |

|          |                  | relative and absolute paths  |                           |
|----------|------------------|--|---------------------------|
| bank     | bank index       | Specify the FW updating start bank,<br>default is 0  | --bank 0                  |
| slave    | slave<br>address | Specify isp slave address for FW upadting<br>0: auto detect isp salve address<br>others: specify isp slave address | --slave 0<br>--slave 0x94 |
| flagaddr | User flag        | Specify user flag address  | 0x4F8FE                   |