

---

# RK3568 boot下载失败处理方法

---

因RK3568旧芯片存在flash兼容问题，在完全擦除后，出现无法下载boot的异常现象，处理方法如下。

## 安装xrock烧录工具

---

### 项目源码路径

<https://gitee.com/xboot/xrock>

### Linux平台编译安装

The xrock tools depends on the `libusb-1.0` library, you need to install `libusb-1.0-0-dev` before compile, for example in ubuntu:

```
sudo apt install libusb-1.0-0-dev
```

Then just type `make` at the root directory, you will see a binary program.

```
git clone https://gitee.com/xboot/xrock.git
cd xrock
make
sudo make install
```

### Window 平台可直接下载

<https://gitee.com/xboot/xrock/releases>

## XROCK命令行参数

---

```
usage:
  xrock maskrom <ddr> <usbplug> [--rc4-off] - Initial chip using ddr and
usbplug in maskrom mode
  xrock version                               - Show chip version
  xrock capability                             - Show capability information
  xrock reset [maskrom]                       - Reset chip to normal or maskrom
mode
  xrock hexdump <address> <length>            - Dumps memory region in hex
  xrock dump <address> <length>               - Binary memory dump to stdout
  xrock read <address> <length> <file>        - Read memory to file
  xrock write <address> <file>                - Write file to memory
  xrock exec <address>                        - Call function address
  xrock flash                                 - Detect flash and show
information
  xrock flash erase <sector> <count>          - Erase flash sector
  xrock flash read <sector> <count> <file>    - Read flash sector to file
  xrock flash write <sector> <file>          - Write file to flash sector
```

## 处理步骤

---

本处理方法仅以linux系统为例，对于window系统理论上也是可行的，但windows上驱动安装比较麻烦，不推荐。建议在linux系统上操作，不需要安装任何驱动程序。

## 第一步，确认板子运行在maskrom模式

如果板子运行在loader模式，需要通过短接EMMC重新上电，或者运行如下指令进入maskrom模式

```
sudo xrock reset maskrom
```

## 第二步，运行xrock的maskrom指令，进入loader模式

```
sudo xrock maskrom rk3568_ddr_920MHz_v1.05.bin rk356x_usbplug_v1.05.bin --rc4-off
```

## 第三步，写入16MB头文件

```
sudo xrock flash write 0 16MB.bin
```

经过这三步处理后，就可以正常烧录。