

一.Rock_5b使用介绍

1.所需配件

存储

tf卡、emmc、nvme任选其一

系统镜像文件

[官方系统下载](#)

包括ubuntu、debian、安卓

账户密码 rock rock

armbian没用自己创建密码, 默认是 root 1234

自行编译armbian

注意boot要改成fat格式

```
BOOTFS_TYPE="fat"
```

[整合包系统下载@amazingfate](#)

[Openwrt](#)

[Uos](#)

基于Arch的RebornOs

<https://github.com/RebornOS-Developers/lxqt-rock5b-image>

[RebornOS论坛链接](#)

<https://forum.radxa.com/t/arch-based-rebornos-reviewed-on-rock5b/14237/5>

[Reborn OS安装wiki](#)

spi下载

[loader](#)

[官方spi-debug版](#)

[官方spi-关闭uboot串口输出](#)

[armbianspi](#)

[zero-擦除spi](#)

[SDK](#)

[rk驱动](#)

[RKDevTool](#)

[balenaEtcher](#)

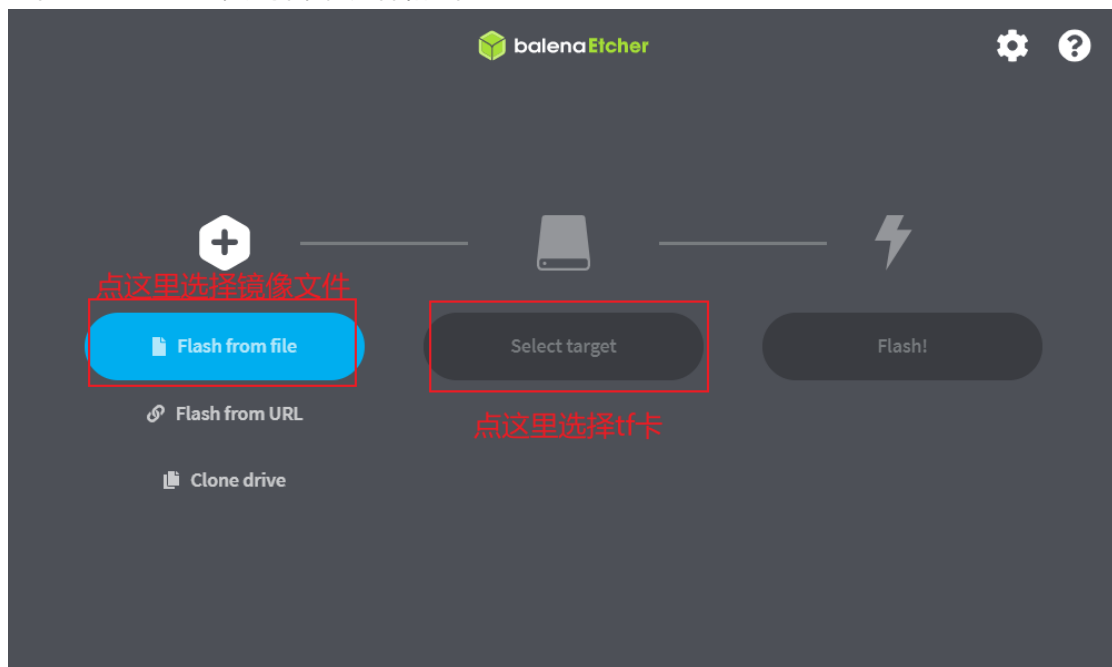
[Win32Diskimager](#)

2.win刷写镜像

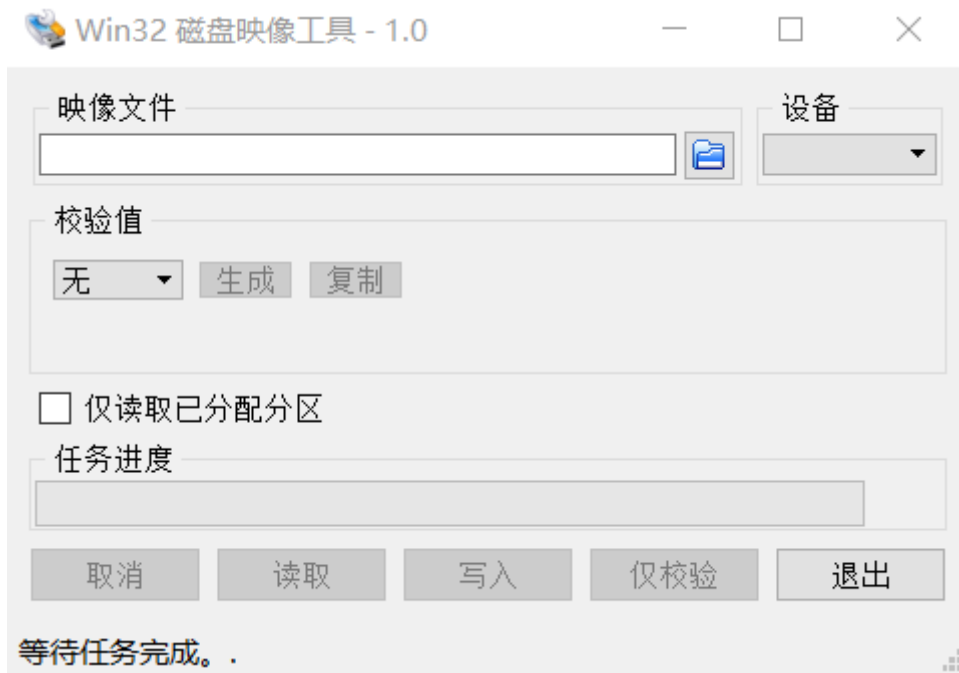
2.1.tf卡

- 使用 balenaEtcher 烧录

1. 使用读卡器把 TF 卡插入电脑
2. 使用解压软件解压镜像压缩包，解压后的文件中，以“.img”结尾的文件就是操作系统的镜像文件
3. 运行balenaEtcher，选择镜像文件和tf卡

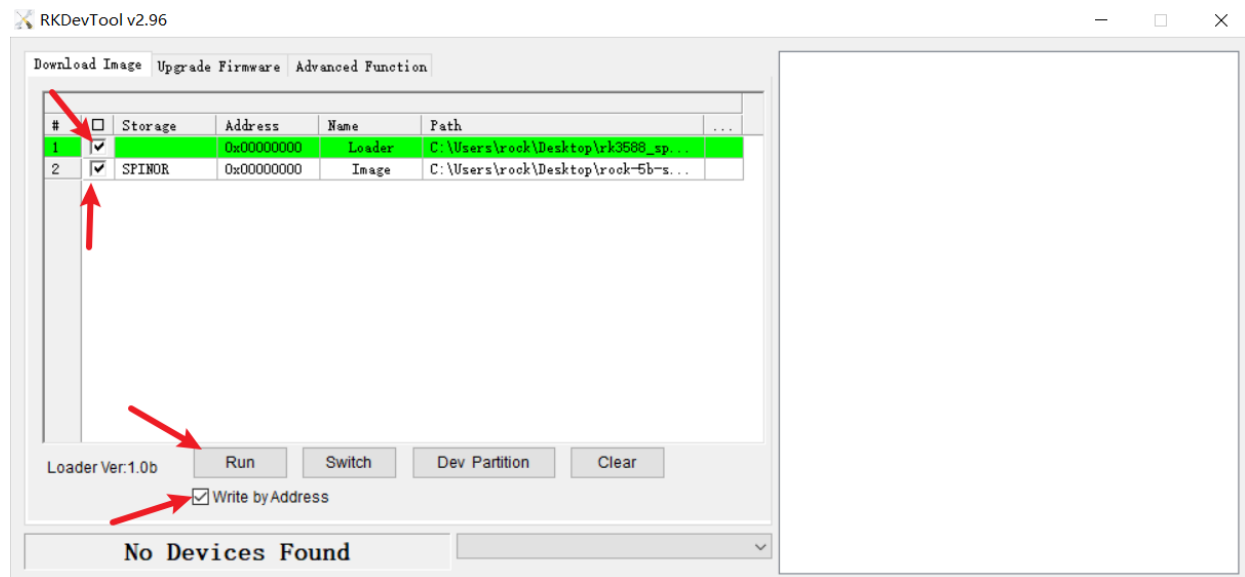


- 使用 Win32Diskimager 烧录



2.2.NVME固态

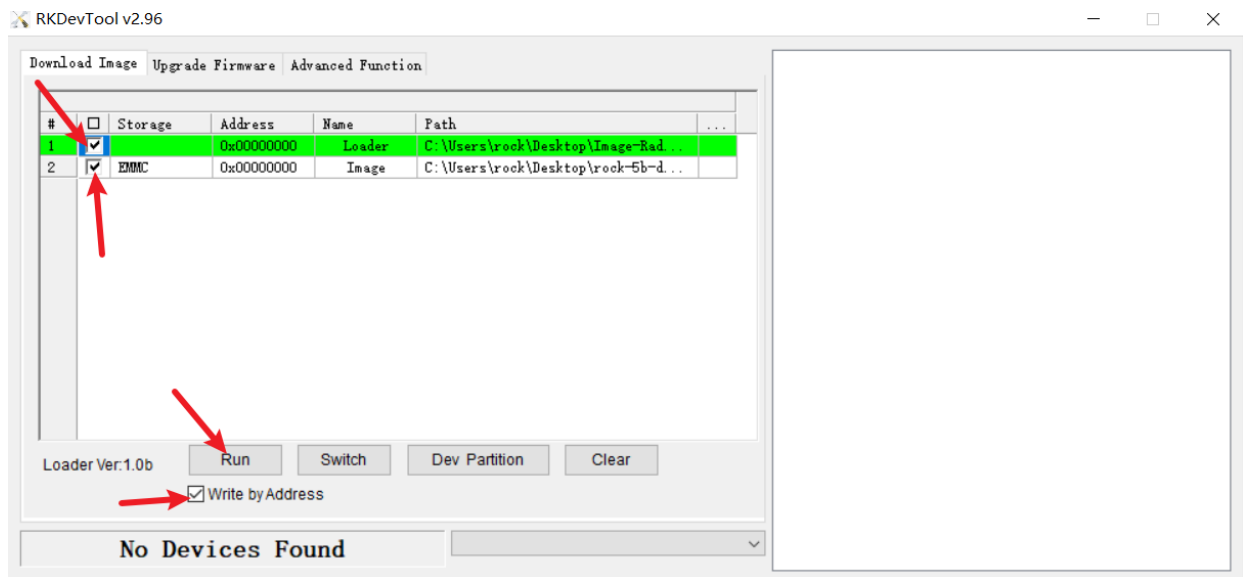
- 下载loader和对应的spi
- 下载RKDevTool和rk驱动，安装rk驱动，按住mskrom按钮后上电
- 打开RKDevTool，右键，load config 选择rock-5b-spinor.cfg



- spinor选择你下载的spi，loader选择下载的loader，点击run 刷写spi
- 按照刷写镜像到tf卡一样操作刷到nvme，插入5b通电开机

2.3 emmc

- 下载loader和系统镜像
- 下载RKDevTool和rk驱动，安装rk驱动，按住mskrom按钮后上电
- 打开RKDevTool，右键，load config 选择rock-5b-emmc.cfg



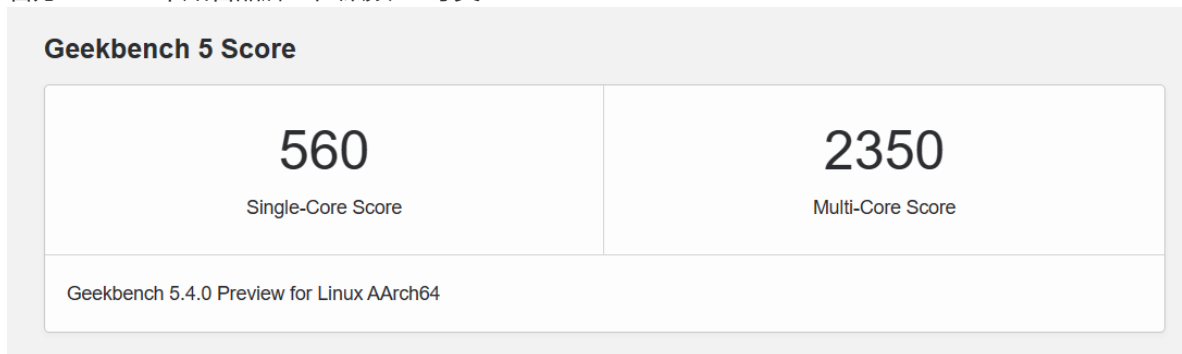
- image选择你下载的系统镜像，loader选择下载的loader，点击 run 刷写系统镜像
- emmc插入5b通电开机

3.Linux刷写镜像

使用dd命令，没有linux基础的请跳过

二.跑分参考

- 官方ubuntu-不知名品牌tf卡-默频2.5等奖



跑分软件

[geekbench5](https://www.geekbench.com/)

[geekbench6](#)

抽奖工具@[happyme531](#)

也可以手动抽奖

```
dmesg | grep pvtm
```

三.armbian系统超频

下载[unlock.dts](#)

修改13500000为你想要的电压

13500000是1.35v

上传到boot目录

```
armbian-add-overlay unlock.dts
```

四.网卡蓝牙修复(ax系列网卡)

[MoMo](#) ax210

[半世一夕](#) ax200

ax210 005

```
sudo mv /usr/lib/firmware/iwlwifi-ty-a0-gf-a0.pnvm /usr/lib/firmware/iwlwifi-ty-a0-gf-a0.bak
```

五.驱动

. GPU

添加@[amazingfate](#)大佬的ppa源

只适用ubuntu22.04 LTS(jammy)

```
sudo add-apt-repository ppa:liujianfeng1994/panfork-mesa
sudo apt update
```

. 多媒体娱乐

包括 chromium110、ffmpeg4.4、gststreamer、kodi19.4、moonlight、obs28 等

```
sudo add-apt-repository ppa:liujianfeng1994/rockchip-multimedia
sudo apt update
```

六.定制自己的armbian

- 首先克隆[@amazingfate的armbian-compile-action](https://github.com/amazingfate/armbian-compile-action)，再克隆[armbian-rock5b-images](https://github.com/amazingfate/armbian-rock5b-images)
- 修改armbian-compile-action中的action.yml

```
./compile.sh \  
BOARD=${{ inputs.board }} \  
BRANCH=${{ inputs.branch }} \  
RELEASE=${{ env.release }} \  
BUILD_MINIMAL=${{ env.build-minimal }} \  
BUILD_DESKTOP=${{ env.build-desktop }} \  
KERNEL_ONLY=no \  
KERNEL_CONFIGURE=no \  
DESKTOP_ENVIRONMENT=${{ env.desktop-environment }} \  
DESKTOP_ENVIRONMENT_CONFIG_NAME=${{ env.desktop-environment-config-name }} \  
DESKTOP_APPGROUPS_SELECTED=${{ env.desktop_appgroups_selected }} \  
EXPERT=${{ env.expert }} \  
BOARD_FIRMWARE_INSTALL="-full" \  
SHARE_LOG=no \  
DEBUG=yes \  
COMPRESS_OUTPUTIMAGE=sha,gpg,xz  
# 修改相应参数  
touch .ignore_changes  
    wget https://github.com/amazingfate/armbian-h88k-  
images/raw/master/board-dts-add-h88k.patch -O patch/kernel/rockchip-rk3588-  
legacy/board-makefile-add-h88k.patch  
    mkdir -p arch/arm64/boot/dts/rockchip/  
    wget https://github.com/amazingfate/armbian-h88k-  
images/raw/master/rk3588-h88k.dts -O arch/arm64/boot/dts/rockchip/rk3588-  
h88k.dts  
    git diff --no-index --output=./patch/kernel/rockchip-rk3588-  
legacy/board-dts-add-h88k.patch /dev/null arch/arm64/boot/dts/rockchip/rk3588-  
h88k.dts || ls -l ./patch/kernel/rockchip-rk3588-legacy/board-dts-add-h88k.patch  
    wget https://github.com/amazingfate/armbian-h88k-  
images/raw/master/h88k.csc -O config/boards/h88k.csc  
    cp -r patch/u-boot/legacy/board-rock-5b patch/u-boot/legacy/board_h88k  
    sed -i "s|# CONFIG_SENSORS_PWM_FAN is not  
set|CONFIG_SENSORS_PWM_FAN=y|g" config/kernel/linux-rockchip-rk3588-  
legacy.config  
    sed -i "s|ext4|fat|g" config/boards/rock-5b.wip  
    wget https://github.com/amazingfate/armbian-h68k-  
images/raw/master/backport-v6.0.16.patch -O patch/kernel/archive/rk35xx-  
5.10/backport-6.0.16.patch  
    wget https://github.com/amazingfate/armbian-h68k-  
images/raw/master/board-add-hinlink-h6xk-makefile.patch -O  
patch/kernel/archive/rk35xx-5.10/board-add-hinlink-h6xk-makefile.patch  
    wget https://github.com/amazingfate/armbian-h68k-  
images/raw/master/rk3568-hinlink-h6xk.dtsi -O  
arch/arm64/boot/dts/rockchip/rk3568-hinlink-h6xk.dtsi
```

```
wget https://github.com/amazingfate/armbian-h68k-
images/raw/master/rk3568-hinlink-h66k.dts -O
arch/arm64/boot/dts/rockchip/rk3568-hinlink-h66k.dts
wget https://github.com/amazingfate/armbian-h68k-
images/raw/master/rk3568-hinlink-h68k.dts -O
arch/arm64/boot/dts/rockchip/rk3568-hinlink-h68k.dts
git diff --no-index --output=./patch/kernel/archive/rk35xx-5.10/rk3568-
dtsi-add-hinlink-h6xk.patch /dev/null arch/arm64/boot/dts/rockchip/rk3568-
hinlink-h6xk.dtsi || ls -l ./patch/kernel/archive/rk35xx-5.10/rk3568-dtsi-add-
hinlink-h6xk.patch
git diff --no-index --output=./patch/kernel/archive/rk35xx-5.10/board-
dts-add-hinlink-h66k.patch /dev/null arch/arm64/boot/dts/rockchip/rk3568-
hinlink-h66k.dts || ls -l ./patch/kernel/archive/rk35xx-5.10/board-dts-add-
hinlink-h66k.patch
git diff --no-index --output=./patch/kernel/archive/rk35xx-5.10/board-
dts-add-hinlink-h68k.patch /dev/null arch/arm64/boot/dts/rockchip/rk3568-
hinlink-h68k.dts || ls -l ./patch/kernel/archive/rk35xx-5.10/board-dts-add-
hinlink-h68k.patch
wget https://github.com/amazingfate/armbian-h68k-
images/raw/master/linux-rk35xx-legacy.config -O config/kernel/linux-rk35xx-
legacy.config
wget https://github.com/amazingfate/armbian-h68k-
images/raw/master/hinlink-h66k.conf -O config/boards/hinlink-h66k.conf
wget https://github.com/amazingfate/armbian-h68k-
images/raw/master/hinlink-h68k.conf -O config/boards/hinlink-h68k.conf
git status
# 需要打自己的补丁和内核config的参考以上指令
```

- 修改armbian-rock5b-images的build.yml

```
BOARD: [rock-5b]
DISTRO: [armbian]
FLAVOR: [ubuntu]
BRANCH: [legacy]
# 修改以上四个参数
```

push触发action构建，开始构建系统然后上传release

七.其他问题与参考资料

Docker不能使用

```
sudo update-alternatives --set iptables /usr/sbin/iptables-legacy
sudo update-alternatives --set ip6tables /usr/sbin/ip6tables-legacy
```

或者参考[文档](#)勾选相关选项编译内核替换

内核编译

Firefox主页问题

修改配置文件

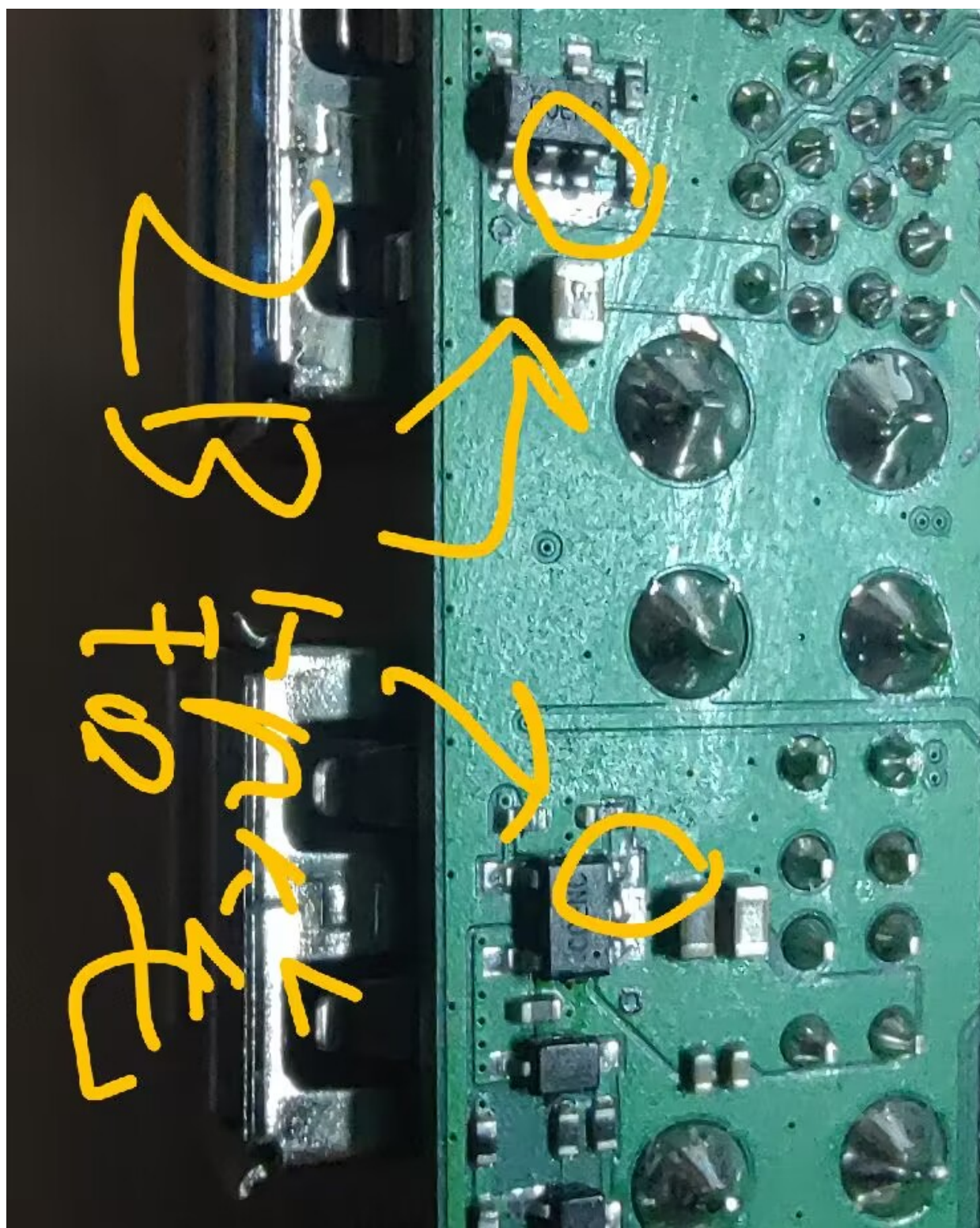
```
/usr/lib/firefox-esr/mozilla.cfg
```

[5b主线内核进度](#)

[kevinxiasx的wiki](#) [git仓库](#)

[ffmpeg补丁](#)

USB电流限制



怕电流太大可以拿铅笔涂一涂测一测，电流小就多涂点，电流大就像橡皮擦一擦