

# 镜像说明

因为1.14寸屏幕和40P屏幕接口有冲突，固有两个镜像

img\_SPI\_nand\_mpu6050\_lcd666\_wifi 使用大屏幕

img\_SPI\_nand\_mpu6050\_l.14\_wifi 使用小屏幕

## 1.1 lcd666镜像使用

### 1.1.1 烧录镜像：

这里使用镜像img\_SPI\_nand\_mpu6050\_lcd666\_wifi，烧录方法参考瑞芯微官方

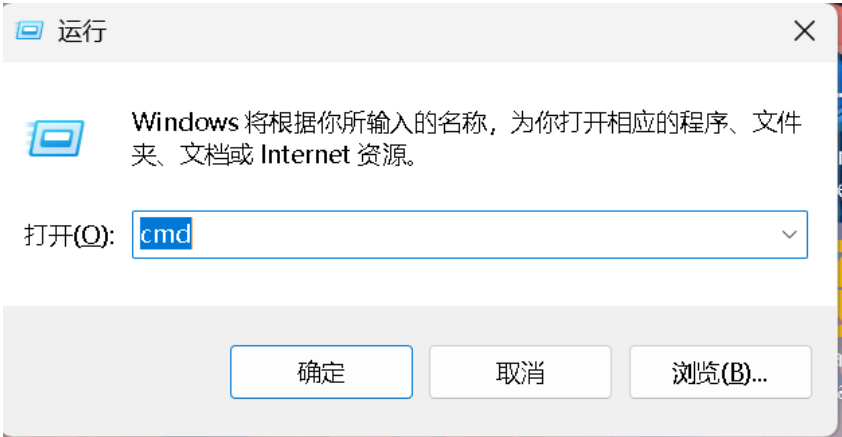
地址：[SPI NAND Flash 镜像烧录 | LUCKFOX WIKI](#)

### 1.1.2 文件传输：

提供所需驱动文件,如图：

名称	修改日期	类型	大小
rtl8723ds.ko	2025/3/19 19:43	KO 文件	1,495 KB
mpu6050_dts.ko	2025/3/19 12:42	KO 文件	165 KB
mpu6050Demo	2025/3/21 11:31	文件	8 KB
output_240x135.mp4	2025/3/16 14:11	媒体文件(.mp4)	27,232 KB
output_dong_480_272.mp4	2025/3/21 12:09	媒体文件(.mp4)	8,720 KB

使用adb push传输至小电脑的root文件夹，win+r键，输入cmd回车，如图：



```
C:\Users\lenovo>adb push "E:\RV1106\RV1106 镜像适配\立创镜像资料\img_SPI_nand_mpu6050_lcd666_wifi\驱动文件\output_dong_480_272.mp4" /root/output_dong_480_272.mp4
E:\RV1106\RV1106 镜像适配\立创镜像资料\img_SPI_nand_mpu6050_lcd666_wifi\驱动文件\output_dong_480_272.mp4: 1 file pushed. 4.4 MB/s (8928642 bytes in 1.943s)
C:\Users\lenovo>
```

每一个文件都需要传输，查看小电脑的root文件夹：

```
[root@luckfox root]# ls
mpu6050Demo          output_240_135.mp4    rtl8723ds.ko
mpu6050_dts.ko       output_dong_480_272.mp4
[root@luckfox root]#
```

### 1.1.3 使用屏幕:

```
ffmpeg -re -i output_dong_480_272 -vf "scale=480:272,fps=60" -pix_fmt bgra -f fbdev /dev/fb0
```

带音频输出命令

```
ffmpeg -re -i output_dong_480_272 -vf "scale=480:272,fps=60" -pix_fmt bgra -f fbdev /dev/fb0 -f wav -  
| aplay -D hw:0,0
```

### 1.1.4 使用wifi:

关于测试wifi和陀螺仪的视频教程可以参考B站:

[个人小电脑新添驱动哔哩哔哩bilibili](#)

加载WiFi驱动, 输入insmod rtl8723ds.ko

输入ifconfig, 如图:

```
collisions:0 txqueuelen:1000  
RX bytes:45772 (44.6 KiB) TX bytes:45772 (44.6 KiB)  
  
usb0    Link encap:Ethernet  HWaddr 3E:19:0B:52:71:A5  
        inet addr:172.32.0.93 Bcast:172.32.255.255 Mask:255.255.0.0  
        UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1  
        RX packets:218 errors:0 dropped:64 overruns:0 frame:0  
        TX packets:21 errors:0 dropped:0 overruns:0 carrier:0  
        collisions:0 txqueuelen:1000  
        RX bytes:33686 (32.8 KiB) TX bytes:3387 (3.3 KiB)  
  
wlan0    Link encap:Ethernet  HWaddr 34:75:63:21:CC:E5  
        BROADCAST MULTICAST  MTU:1500  Metric:1  
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0  
        TX packets:0 errors:0 dropped:0 overruns:0 carrier:0  
        collisions:0 txqueuelen:1000  
        RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)  
  
wlan1    Link encap:Ethernet  HWaddr 36:75:63:21:CC:E5  
        BROADCAST MULTICAST  MTU:1500  Metric:1  
        RX packets:0 errors:0 dropped:0 overruns:0 frame:0  
        TX packets:0 errors:0 dropped:0 overruns:0 carrier:0  
        collisions:0 txqueuelen:1000  
        RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)
```

有wlan0, 则代表, 检测到了wifi

输入nano /etc/wpa\_supplicant.conf, 配置如下, ssid为wifi名称, psk不用我说了吧

```
ctrl_interface=/var/run/wpa_supplicant
ap_scan=1

network={
ssid="chen"
psk="123456789"
key_mgmt=WPA-PSK
}
```

^X Exit    ^O Write Out    ^W Where Is    M-Q Previous    ^K Cut    ^C Location  
^L Refresh    ^R Read File    ^\ Replace    M-W Next    ^U Paste    ^\_ Go To Line

连接wifi： wpa\_supplicant -B -i wlan0 -c /etc/wpa\_supplicant.conf

分配IP地址： udhcpc -i wlan0

ping [www.baidu.com](http://www.baidu.com)

```
[root@luckfox root]# wpa_supplicant -B -i wlan0 -c /etc/wpa_supplicant.conf
Successfully initialized wpa_supplicant
rfkill: Cannot open RFKILL control device
[root@luckfox root]# udhcpc -i wlan0
udhcpc: started, v1.36.1
udhcpc: broadcasting discover
udhcpc: broadcasting select for 192.168.153.222, server 192.168.153.254
udhcpc: lease of 192.168.153.222 obtained from 192.168.153.254, lease time 3599
deleting routers
adding dns 192.168.153.254
[root@luckfox root]# ping www.baidu.com
PING www.baidu.com (153.3.238.28): 56 data bytes
64 bytes from 153.3.238.28: seq=0 ttl=52 time=63.820 ms
64 bytes from 153.3.238.28: seq=1 ttl=52 time=31.284 ms
64 bytes from 153.3.238.28: seq=2 ttl=52 time=33.270 ms
64 bytes from 153.3.238.28: seq=3 ttl=52 time=29.744 ms
64 bytes from 153.3.238.28: seq=4 ttl=52 time=33.571 ms
64 bytes from 153.3.238.28: seq=5 ttl=52 time=25.675 ms
^C
--- www.baidu.com ping statistics ---
6 packets transmitted, 6 packets received, 0% packet loss
round-trip min/avg/max = 25.675/36.227/63.820 ms
[root@luckfox root]#
```

## 1.1.5 驱动mpu6050:

insmod mpu6050\_dts.ko

chmod +x mpu6050Demo

./mpu6050Demo

如图

```
[root@luckfox root]# insmod mpu6050_dts.ko
[ 768.146631] mpu6050 ID = 0X68
[root@luckfox root]# chmod +x mpu6050Demo
[root@luckfox root]# ./mpu6050Demo

ADC value:
gx = 143, gy = -50, gz = -6
ax = -173, ay = 131, az = -2150
temp = -2772
TRUE value:act gx = 8.72°/S, act gy = -3.05°/S, act gz = -0.37°/S
act ax = -0.08g, act ay = 0.06g, act az = -1.05g
act temp = 16.44°C

ADC value:
gx = 138, gy = -55, gz = -8
ax = -178, ay = 132, az = -2138
temp = -2772
TRUE value:act gx = 8.41°/S, act gy = -3.35°/S, act gz = -0.49°/S
act ax = -0.09g, act ay = 0.06g, act az = -1.04g
act temp = 16.44°C
```

## 1.2 镜像使用:

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除了屏幕不同外, 其他同上:

- **使用屏幕:**

```
ffmpeg -re -i output_240_135.mp4 -vf "scale=240:135" -pix_fmt rgb565 -r 30 -f fbdev /dev/fb0
```

带音频:

```
ffmpeg -re -i output_240_135.mp4 -vf "scale=240:135" -pix_fmt rgb565 -r 30 -f fbdev /dev/fb0 -f wav - | aplay -D hw:0,0
```

使用 ffmpeg 转换图片格式:

```
ffmpeg -i output.jpg -vf "scale=240:135" -pix_fmt rgb565 output.rgb
```

dd命令写入: 64800是 1352402

```
dd if=output.rgb of=/dev/fb0 bs=64800
```

这样就可以显示图片啦!!

设置音量为20%:

```
amixer set 'DAC LINEOUT' 20%
```




- **其他:**

应该没有要补充了吧, 嘿嘿!!

- **py脚本:**

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如果你有其他分辨率的屏幕, 这里提供脚本文件在其他文件夹下:

名称	修改日期	类型	大小
 output_bad_apple.mp4	2025/3/16 16:26	媒体文件(.mp4)	6,864 KB
 output_dong.mp4	2025/3/16 16:20	媒体文件(.mp4)	4,931 KB
 转mp42.py	2025/3/21 13:03	Python File	2 KB

```

from moviepy.editor import VideoFileClip

# width=240, height=135
1 个用法
def resize_video(input_file, output_file, width=480, height=272):
    """
    将 MP4 文件转换为指定分辨率（默认 240x135）的 MP4 文件，并保留音频。

    参数:
        input_file (str): 输入视频文件路径。
        output_file (str): 输出视频文件路径。
        width (int): 目标宽度（默认 240）。
        height (int): 目标高度（默认 135）。
    """
    try:
        # 加载视频（包含音频）
        clip = VideoFileClip(input_file)
        # 调整分辨率
        resized_clip = clip.resize((width, height))
        # 保存为新的 MP4 文件（保留音频）
        resized_clip.write_videofile(output_file, fps=clip.fps)
        print(f"视频已成功转换为 {width}x{height} 并保存为 {output_file}")
    except Exception as e:
        print(f"转换失败: {e}")

if __name__ == "__main__":
    # 输入文件路径
    # input_file = r"G:\Bad Apple but it's in 4k 60fps.mp4"
    # 输入文件路径
    input_file = r"G:\up_dianhu.mp4"
    # 输出文件路径
    output_file = "up_dianhu_480_272.mp4"

    # 调用函数调整视频分辨率
    resize_video(input_file, output_file)
e_video()

```

```

typedef struct {
    int fd;
    const char *dev_name;
} uart_info_t;

typedef struct {
    log_queue_t *queue;
    const char *dir_name;
    const uart_info_t *uart_list;
    int uart_count;
} log_thread_arg_t;

```

```
log_queue_t* queue_create() {  
    log_queue_t *q = calloc(1, sizeof(log_queue_t));  
    pthread_mutex_init(&q->lock, NULL);  
    pthread_cond_init(&q->cond, NULL);  
    return q;  
}
```

如何使用，注释写得很清楚了

好了，编写的也有些累了，祝你复刻顺利哈!!!

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