

# 树莓派配置ubuntu20.04

## 系统配置

### 镜像

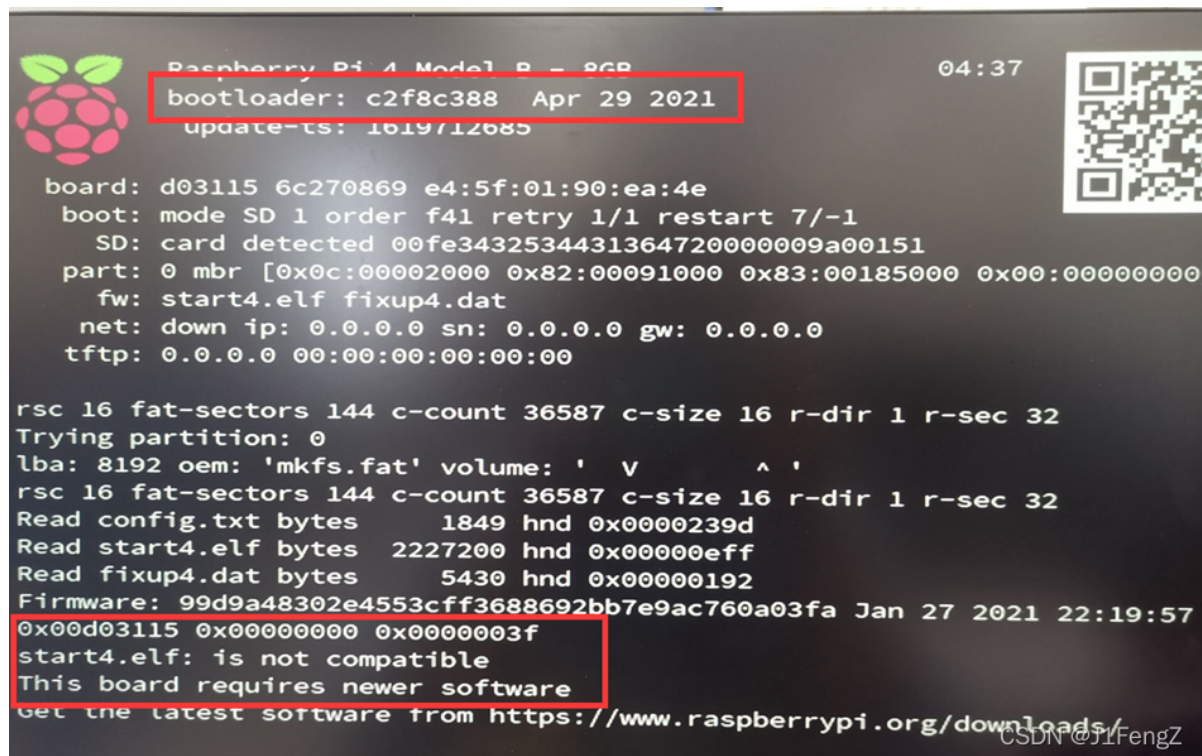
ubuntu mate: <https://releases.ubuntu-mate.org/20.04/arm64/>

正版ubuntu20.04 desktop的镜像没有找到，目前采用的方法是先装server版，再单独装桌面。server版的镜像在树莓派官方提供的烧录软件里就有，下载地址是[https://downloads.raspberrypi.org/imager/imager\\_latest.exe](https://downloads.raspberrypi.org/imager/imager_latest.exe)

### 启动报错

**注意：树莓派启动需要先插显示器再插电源！！！否则显示器无画面**

如果启动的时候报这个错，说明树莓派的固件需要更新，去这个网站下载最新固件<https://github.com/raspberrypi/rpi-firmware>，看显示什么固件出问题就换对应的就行，即如果提示 start4.elf 不可用，则将系统的boot盘中的 start4.elf 与 fixup4.dat 用下载的最新固件包中的相同文件替换即可。



The image shows the Raspberry Pi boot screen. At the top left is the Raspberry Pi logo. The text displays the board model (Raspberry Pi 4 Model B - 8GB), the bootloader version (c2f8c388), and the date (Apr 29 2021). It shows the boot process, including SD card detection and partitioning. The error message "start4.elf: is not compatible" is highlighted with a red box, along with the instruction "This board requires newer software". A QR code is visible in the top right corner.

```
Raspberry Pi 4 Model B - 8GB
bootloader: c2f8c388 Apr 29 2021
update-ts: 1619712685

board: d03115 6c270869 e4:5f:01:90:ea:4e
boot: mode SD 1 order f41 retry 1/1 restart 7/-1
SD: card detected 00fe3432534431364720000009a00151
part: 0 mbr [0x0c:00002000 0x82:00091000 0x83:00185000 0x00:00000000]
fw: start4.elf fixup4.dat
net: down ip: 0.0.0.0 sn: 0.0.0.0 gw: 0.0.0.0
tftp: 0.0.0.0 00:00:00:00:00:00

rsc 16 fat-sectors 144 c-count 36587 c-size 16 r-dir 1 r-sec 32
Trying partition: 0
lba: 8192 oem: 'mkfs.fat' volume: ' v ^ '
rsc 16 fat-sectors 144 c-count 36587 c-size 16 r-dir 1 r-sec 32
Read config.txt bytes 1849 hnd 0x0000239d
Read start4.elf bytes 2227200 hnd 0x000000eff
Read fixup4.dat bytes 5430 hnd 0x000000192
Firmware: 99d9a48302e4553cfff3688692bb7e9ac760a03fa Jan 27 2021 22:19:57
0x00d03115 0x00000000 0x00000003f
start4.elf: is not compatible
This board requires newer software
Get the latest software from https://www.raspberrypi.org/downloads/
```

### 配置网络

[https://blog.csdn.net/qg\\_30613365/article/details/120739069](https://blog.csdn.net/qg_30613365/article/details/120739069)

```
cd /etc/netplan
sudo vi 50-cloud-init.yaml
```

这里建议连接手机热点

```
# This file is generated from information provided by the datasource. Changes
# to it will not persist across an instance reboot. To disable cloud-init's
# network configuration capabilities, write a file
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:
# network: {config: disabled}
network:
  ethernets:
    eth0:
      dhcp4: true
      optional: true
  version: 2
  wifis:
    wlan0:
      optional: true
      access-points:
        "MyWiFi":
          password: "MyPass"
      dhcp4: true
```

将MyWiFi换成你的wifi名

将MyPass换成你的wifi密码

CSDN @小白天才

```
sudo netplan -debug try
sudo netplan -debug generate
sudo netplan -debug apply
```

如果没成功连接wifi，重启就行了

注意：用这种方法连接热点后，安装图形化界面时会导致找不到wifi，此时需要再次进入这个文件，把wifis字段的所有内容注释掉，再执行一下上面三行代码就行了。

## 换源

树莓派上ubuntu的源跟正常的不一样，多了一个ports

```
sudo vim /etc/apt/sources.list

# 粘贴到末尾
deb https://mirrors.ustc.edu.cn/ubuntu-ports/ focal main restricted universe
multiverse
deb https://mirrors.ustc.edu.cn/ubuntu-ports/ focal-updates main restricted
universe multiverse
deb https://mirrors.ustc.edu.cn/ubuntu-ports/ focal-backports main restricted
universe multiverse
deb https://mirrors.ustc.edu.cn/ubuntu-ports/ focal-security main restricted
universe multiverse

sudo apt-get update
sudo apt-get upgrade
```

## 安装桌面

[https://blog.csdn.net/weixin\\_44415639/article/details/123357377](https://blog.csdn.net/weixin_44415639/article/details/123357377)

```
sudo apt install ubuntu-desktop
```

此时重启完就有桌面了

## 查看本机ip

```
ifconfig # 查看公网ip, 进行ssh或vnc连接
```

## 安装RealVNC

<https://www.realvnc.com/en/connect/download/vnc/>

记得选树莓派arm64版的

```
sudo dpkg -i VNC-Server*.deb
```

设置开机自启

```
sudo systemctl enable vncserver-x11-serviced.service
```

启动VNC

```
sudo systemctl start vncserver-x11-serviced.service
```