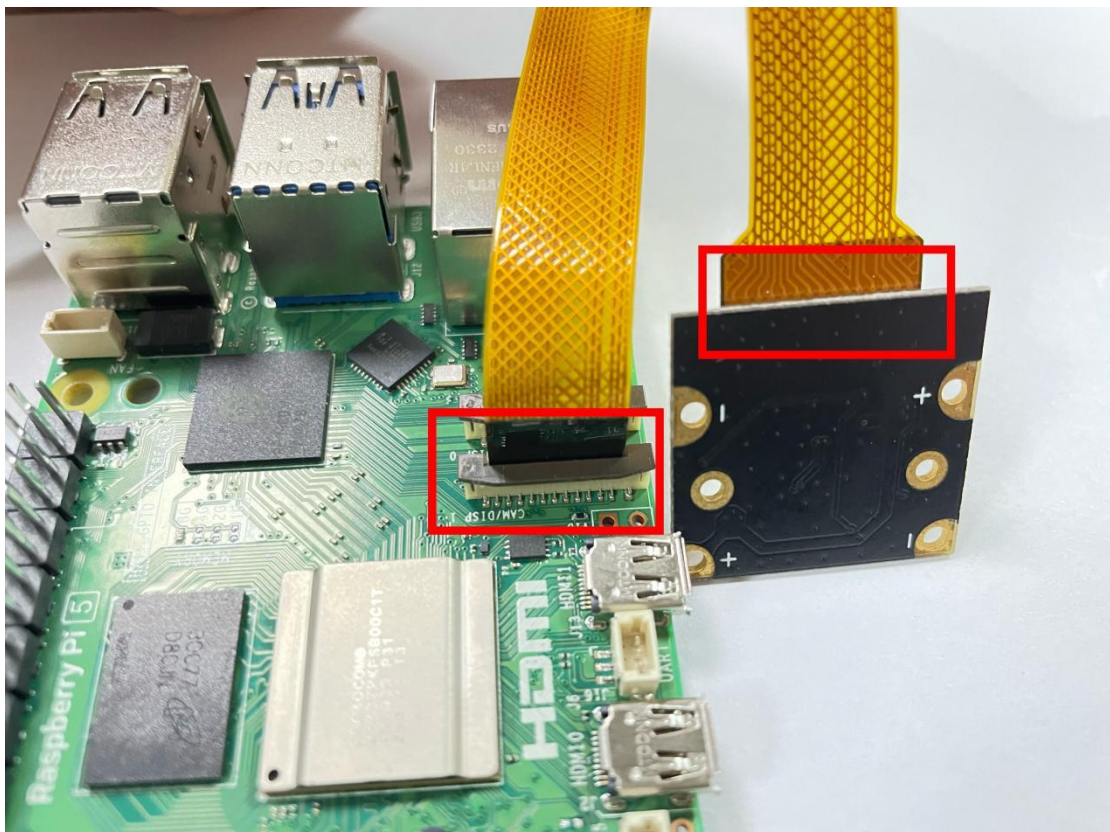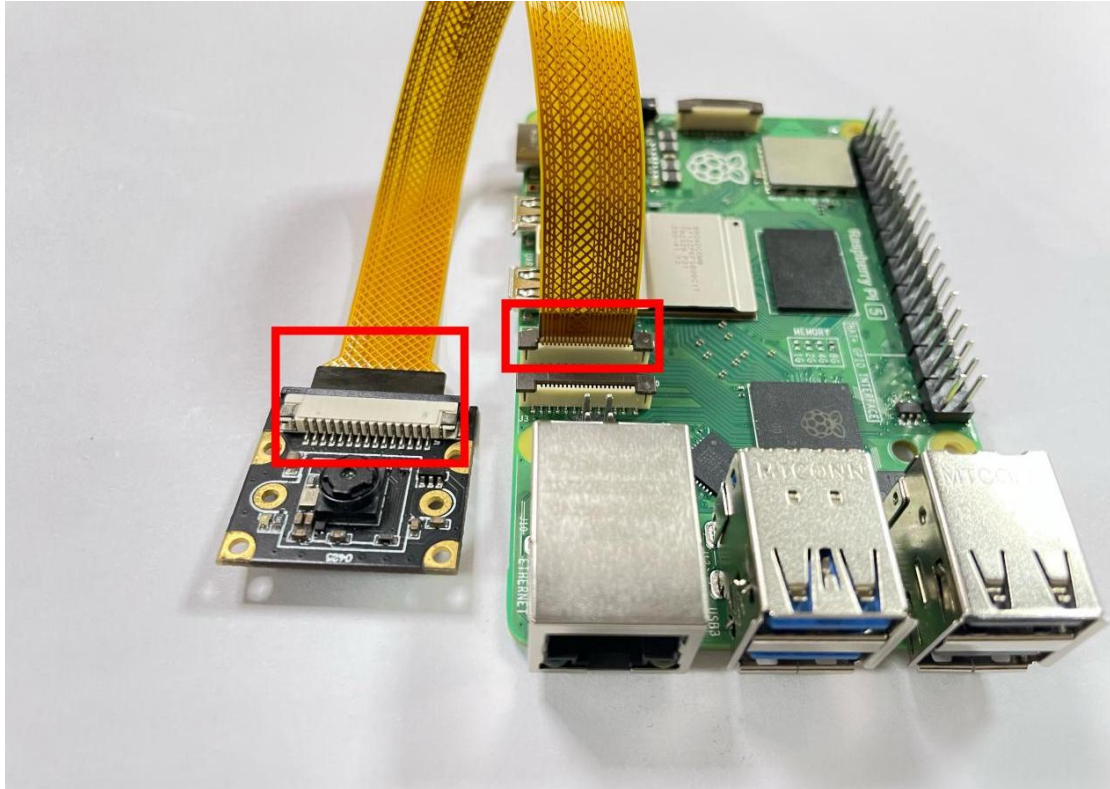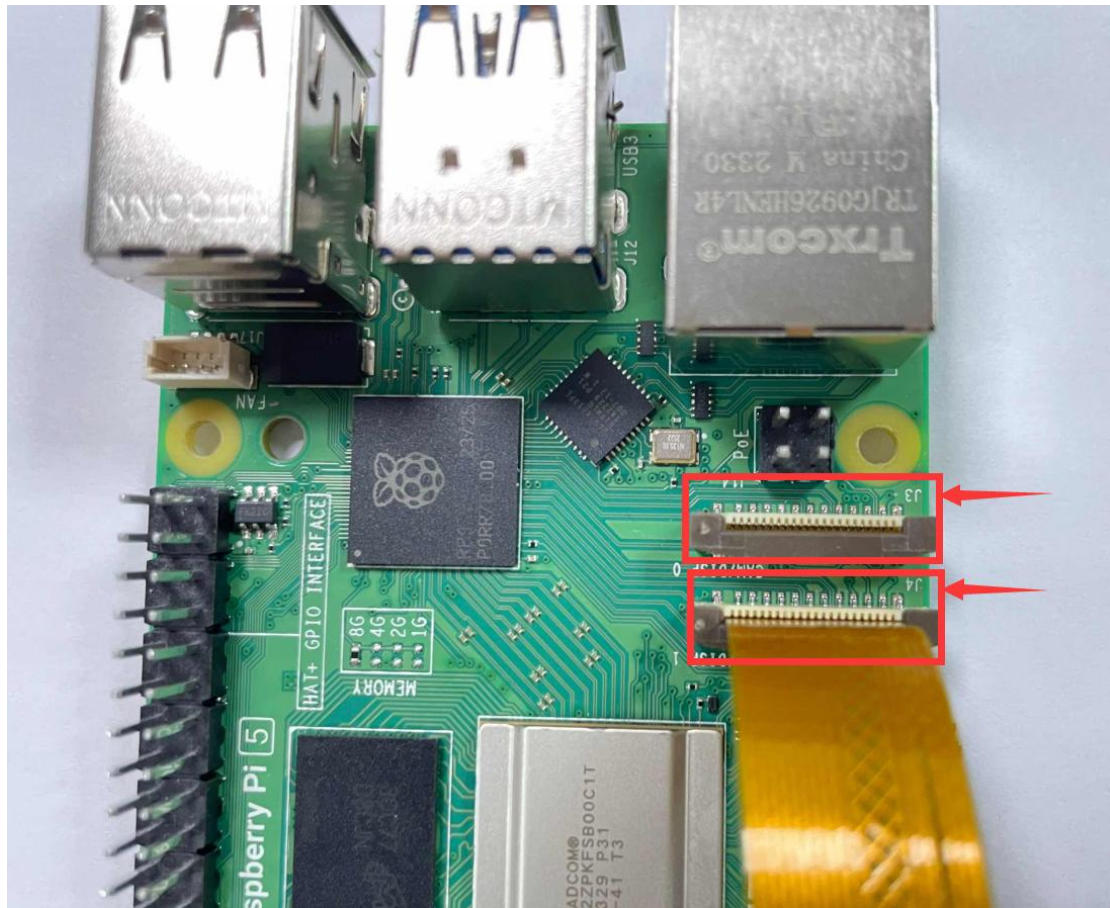Note: The old version Raspberry Pi system is not compatible with this camera. It is recommended to use the latest system for camera testing. This tutorial is produced using the Debian12 system.

1.Camera connection

As shown in the picture below, connect the camera cable to Raspberry Pi J4. J3 does not support this camera yet.

Align the cable pins with the camera and Raspberry Pi pins, and align the black insulated end of the cable with the black insulated end of the Raspberry Pi and camera.
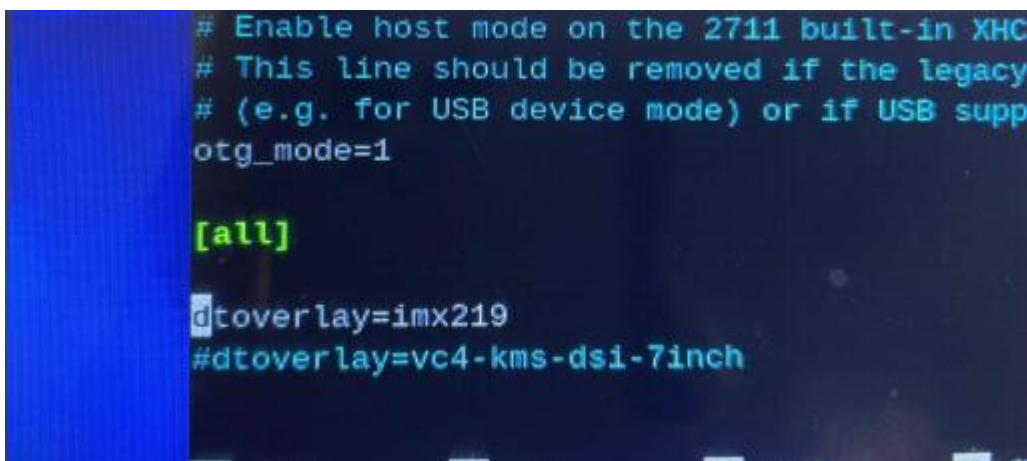
2.Modify /boot/firmware/config.txt configuration file

Open the Raspberry Pi terminal and input the following commands

```
sudo nano /boot/firmware/config.txt
```

Add dtoverlay=imx219 at the end

Press "ctrl + x" to save, press "Y" and enter (Enter) to exit.

Method-1: Raspberry Pi official driver imx219 camera

Official driver camera tutorial website:

https://www.raspberrypi.com/documentation/computers/camera_software.html#libcamera-and-libcamera-apps

1)Input the following command to drive the camera

```
libcamera-hello
```


Method-1:Run code to driver imx219 camera

1) Remotely transfer camera.py file to Raspberry Pi
2) Enter the command to drive the camera

```
python3 camera.py
```