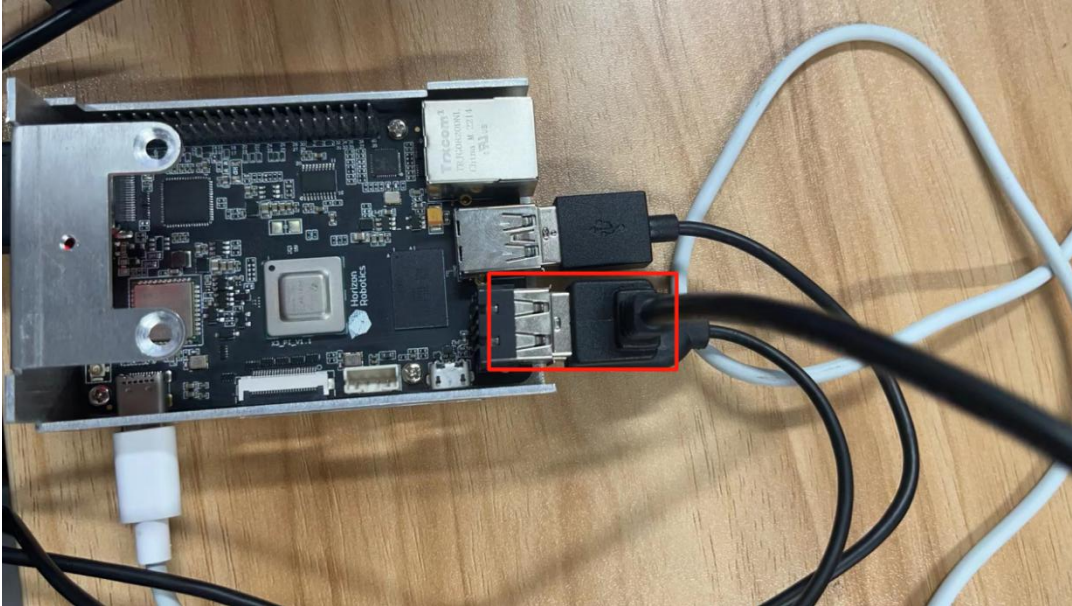


1. Preparation

Horizon Sunrise X3 PI board *1, HD CAMERA *1

2. Hardware

Directly plug the USB interface of the HD camera into the USB port of Horizon Sunrise X3 PI board.



3. Code

After copying the file **camera.py** to the Horizon Sunrise X3 PI system, enter **python3 camera.py** at the terminal command line.

If there is an error in camera initialization.

You can determine which device node the camera is by plugging the camera and entering the command **ls/dev/video ***.

Then change the code, as shown below.

```
# V3.2.1
class Transbot_Camera(object):

    def __init__(self, video_id=8, width=640, height=480, debug=False):
        self.__debug = debug
        self.__video_id = video_id
        self.__state = False
        self.__width = width
        self.__height = height

        self.__video = cv.VideoCapture(self.__video_id)
        # success, _ = self.__video.read()
        success = self.__video.isOpened()
        if not success:
            self.__video_id = (self.__video_id + 1) % 2
            self.__video = cv.VideoCapture(self.__video_id)
            # success, _ = self.__video.read()
            success = self.__video.isOpened()
            if not success:
                if self.__debug:
                    print("-----Camera Init Error!-----")
                return
            self.__state = True

        self.__config_camera()

        if self.__debug:
            print("-----Video%d Init OK!-----" % self.__video_id)
```

4. Experimental results

