VEYE-MIPI-290 Introduction

VEYE-MIPI-290 is a is a special camera module which is compatible with RASPBERRY PI.

She use sony STARVIS sensor——IMX290 and has excellent ISP functions Build-in.The output format is stanard UYVY stream. It is very easy to use it with RASPBERRY PI.

Of course, she also has some subtle differences from the official version.She only support 1080p

resolution,and i2c cmd is different.

So I give you some tools as described below,and of course I give you the source code.

Raspberry Pi Models

Theoretically,VEYE support all Raspberry Pi.

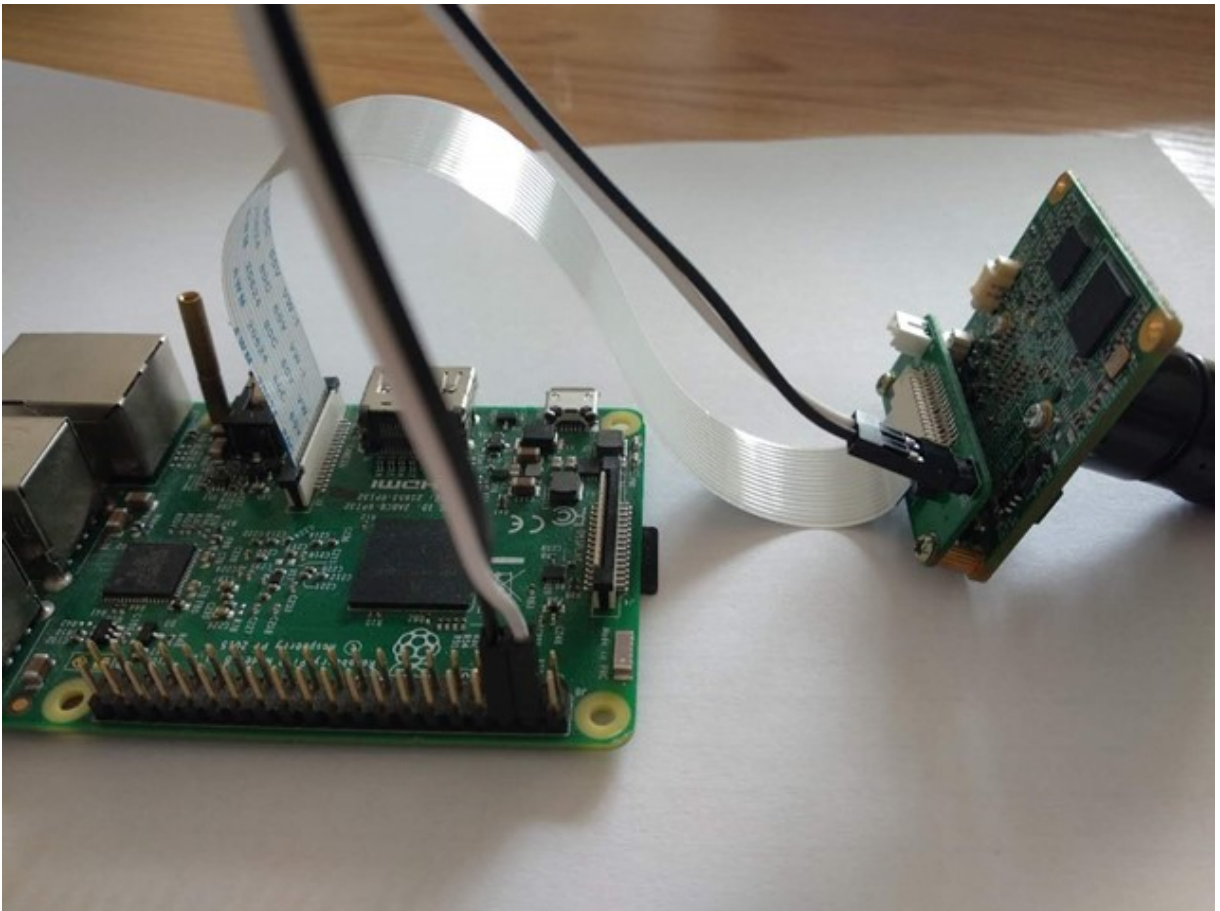For performance reasons, I recommend you use 3 or 3+ Version.

Hardware Connection

VEYE-MIPI-290 cable is compatible with Raspberry Pi by using a small Adapter Board,which is always transfered with VEYE-MIPI-290.

Due to the high power consumption of the camera board, an additional 5V supply is required.

1. FPC cable。
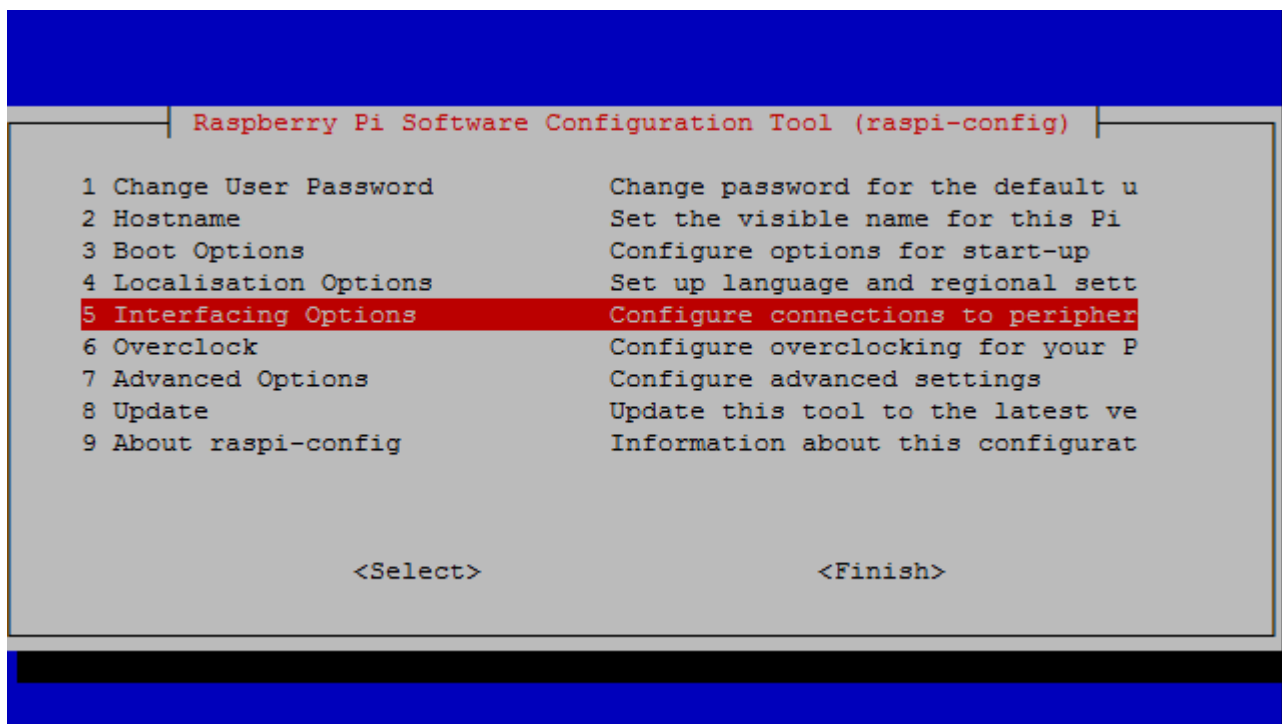2. 5V-DC。
   White：5V，Black：GND。

RaspberryPI System Config

- Install RaspberryPI
  [Install raspberrypi guide](#)
- Config RaspberryPI

1. Camera and I2C

```
1  sudo raspi-config
```

Select 5，Enalbe Camera and I2C，then reboot。

Software Brief

There are two Untils of Software，the Media Untils and I2C Untils. Media Untils provides media related tools. I2C Untils is a Shell Script, by which you can set many configurations of the camera.

Both is open source.

Media Untils Brief

- veye_raspipreview
  ./veye_raspipreview -t 20000
  Privew,20s video real-time display to HDMI output。

- veye_raspivid
  ./veye_raspivid -t 5000 -o ~/test.h264
  Implement H.264 format encoding and record for 5 seconds，Record the stream data to file ~/test.h264.

- veye_raspividyuv
  ./veye_raspividyuv -t 200 -o /dev/shm/test.yuv
  Record UYVY data to file /dev/shm/test.yuv，time is 200ms。

- veye_raspistill
  Capture a image and save it as jpeg file.DEVELOPING.

I2C Untils

HOWTO: I2C cmd scripts usage of VEYE-MIPI-290 on RaspberryPI Platform

Documents and Source Code

Docs and Source Code