www.inno-maker.com

Design Service,Production Service

CAM-MIPI9281RAW-V2

Compile Driver Source Code

Support: support@inno-maker.com
Bulk Price: sales@inno-maker.com

Wiki: wiki.inno-maker.com
Github: https://github.com/INNO-MAKER

1. Compile Driver Source Code

Step1 ,Download Source Code from our github:

```
$sudo git clone https://github.com/INNO-MAKER/CAM-OV9281RAW-V2.git
```

Step2 Install kernel hearders

If you are using the latest version of Raspbian, Install the Linux kernel headers via below command.

```
$sudo apt-get install raspberrypi-kernel-headers-$(uname -r)
```

If you are use the older version of Raspbian or unable to locate package, manually download the correct headers files from below link. We take kernel 5.15.32-v8+(64bit,released data 2020-0404) as an example.

https://archive.raspberrypi.org/debian/pool/main/r/raspberrypi-firmware/

raspberrypi-kernel-headers_1.20220331-1_amd64.deb	2022-04-04 12:55	37M
raspberrypi-kernel-headers_1.20220331-1_arm64.deb	2022-04-04 12:55	9.2M
raspberrypi-kernel-headers_1.20220331-1_armhf.deb	2022-04-04 12:56	27M

Use dpkg tools installl the headers deb files via below command.

```
$sudo dpkg -i raspberry-kernel-headers_1,20220331-1_arm64.deb
```

Step3,Compile the driver source code

```
$cd CAM-OV9281RAW-V2/
$sudo chmod -R a+rwx *
$cd inno_ov9281_driver_source_code/sourcecode
$sudo ./clear.sh
$sudo make
```

Step4,Install the innomaker driver

```
$sudo make install     #Work on 8bit stream mode by default.
```

2. Enable Camera

Step1, edit /boot/config.txt

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

Add below content to the last line

```
dtparam=i2c_vc=on
dtoverlay=vc_mipi_ov9281
```

Step2, edit nano /boot/cmdline.txt

```
$sudo nano /boot/cmdline.txt
```

Add below content to the last line

```
cma=128M
```

Step3 reboot

```
$sudo reboot
```

3. Setmode

Go into the folder with makefile

```
$sudo make setmode1
```

Refer to our fully usermanual For more detail on working mode.

4. Additional remarks

***** Remark If USE pi zero(bcm2835)**

```
dtoverlay=vc_mipi_ov9281,i2c_pins_28_29=1
```

***** Remark If USE CM4 Dual Camera**

```
$sudo cp    vc_mipi_ov9281_cm4_dual.dtbo /boot/overlays
```

Add below content to the last line and reboot

```
dtoverlay=vc_mipi_ov9281_cm4_dual
```