# GenericCameraSensor

Same as generic sensor, but using espcam board.

Requires i2c pins and PIR pin for full data

Graphical user interface, application

Description automatically generatedDiagram, schematic

Description automatically generated

Table

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

A picture containing text, electronics

Description automatically generated

Table

Description automatically generated

#define PWDN\_GPIO\_NUM 32

#define RESET\_GPIO\_NUM -1

#define XCLK\_GPIO\_NUM 0

#define SIOD\_GPIO\_NUM 26

#define SIOC\_GPIO\_NUM 27

#define Y9\_GPIO\_NUM 35

#define Y8\_GPIO\_NUM 34

#define Y7\_GPIO\_NUM 39

#define Y6\_GPIO\_NUM 36

#define Y5\_GPIO\_NUM 21

#define Y4\_GPIO\_NUM 19

#define Y3\_GPIO\_NUM 18

#define Y2\_GPIO\_NUM 5

#define VSYNC\_GPIO\_NUM 25

#define HREF\_GPIO\_NUM 23

#define PCLK\_GPIO\_NUM 22

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **GPIO** | **Input** | **Output** | **Notes** | **Pin Function** |
| **0** | pulled up | OK | outputs PWM signal at boot, must be LOW to enter flashing mode | CAM\_XCLK\_GPIO\_NUM |
| **1** | TX pin | OK | debug output at boot | Serial0\_TX |
| **2** | OK | OK | connected to on-board LED, must be left floating or LOW to enter flashing mode | SD\_DATA0 |
| **3** | OK | RX pin | HIGH at boot | Serial0\_RX |
| **4** | OK | OK |  | SD\_DATA1/flashlight |
| **5** | OK | OK | outputs PWM signal at boot, strapping pin | CAM\_Y2\_GPIO\_NUM |
| **6** | x | x | connected to the integrated SPI flash | NONE |
| **7** | x | x | connected to the integrated SPI flash | NONE |
| **8** | x | x | connected to the integrated SPI flash | NONE |
| **9** | x | x | connected to the integrated SPI flash | NONE |
| **10** | x | x | connected to the integrated SPI flash | NONE |
| **11** | x | x | connected to the integrated SPI flash | NONE |
| **12** | OK | OK | boot fails if pulled high, strapping pin | SD\_DATA2 |
| **13** | OK | OK |  | SD\_DATA3 |
| **14** | OK | OK | outputs PWM signal at boot | SD\_CLK |
| **15** | OK | OK | outputs PWM signal at boot, strapping pin | SD\_CMD |
| **16** | OK | OK |  | GPIO1 = PIR |
| **17** | OK | OK |  |  |
| **18** | OK | OK |  | CAM\_Y3\_GPIO\_NUM |
| **19** | OK | OK |  | CAM\_Y4\_GPIO\_NUM |
| **21** | OK | OK |  | CAM\_Y5\_GPIO\_NUM |
| **22** | OK | OK |  | CAM\_PCLK\_GPIO\_NUM |
| **23** | OK | OK |  | CAM\_HREF\_GPIO\_NUM |
| **25** | OK | OK |  | CAM\_VSYNC\_GPIO\_NUM |
| **26** | OK | OK |  | CAM\_SIOD\_GPIO\_NUM |
| **27** | OK | OK |  | CAM\_SIOC\_GPIO\_NUM |
| **32** | OK | OK |  | CAM\_PWDN\_GPIO\_NUM |
| **33** | OK | OK |  | GPIO3 = PIR |
| **34** | OK |  | input only | CAM\_Y8\_GPIO\_NUM |
| **35** | OK |  | input only | CAM\_Y9\_GPIO\_NUM |
| **36** | OK |  | input only | CAM\_Y6\_GPIO\_NUM |
| **39** | OK |  | input only | CAM\_Y7\_GPIO\_NUM |

# 22June24

Using desksensor to see how the esp32 will react when wifi is not available, so the MAVLink device on the LED plane will work without wifi.

* Ideally, I likely want the wifi to backoff for 1 minute at first, then 10 minutes.