## ESP32-CAM Help Instruction

Thank you very much for purchasing our products, if there are any questions, please feel free to contact us via Amazon or Email, Email: help@aokin.vip, we will do our best for you.

From this link: <a href="https://github.com/aokindiy/document">https://github.com/aokindiy/document</a> can get this ESP32-CAM help in struction electronic document.

Since the ESP32-CAM camera module no onboard serial USB chip, so please use a converter to program it.

For make WiFi and Bluetooth functions are working great. It's important to ensure the bo ards have sufficient power when using WiFi or BT, so be sure to provide a regulated s upply.

Product use reference link, hope it can help you:

https://dronebotworkshop.com/esp32-cam-intro https://randomnerdtutorials.com/projects-esp32-cam

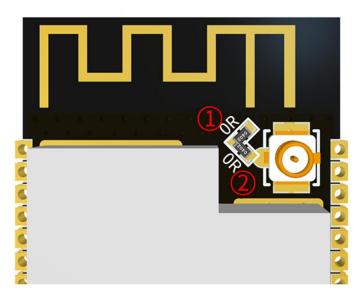
## Note:

- 1. Please make sure that the input power of the module is at least **5V 2A**, otherwise, the picture may unstable.
- 2. The ESP32 GPIO32 pin controls the camera power. When the camera is working, pleas e pull GPIO32 low.
- 3. Since IO0 is connected to the camera XCLK, please leave IO0 floating when using it, and do not connect it to the high or low level.
- 4. The default firmware is already included in the factory, and no additional download is provided. Please be careful if you need to re-burn other firmware.



CAM	ESP32	SD	ESP32
D0	PIN5	CLK	PIN14
D1	PIN18	CMD	PIN15
D2	PIN19	DATA0	PIN2
D3	PIN21	DATA1/Flash	PIN4
D4	PIN36	DATA2	PIN12
D5	PIN39	DATA3	PIN13
D6	PIN34		
D7	PIN35		
XCLK	PIN0		
PCLK	PIN22		
VSYNC	PIN25		
HREF	PIN23		
SDA	PIN26		
SCL	PIN27		
POWER PIN	PIN32		

## PCB antenna/IPEX seat choose one Description



- 1. The module default value is the onboard antenna at position 1. The gain is 2dB.
- 2. If you need to use the IPEX base to connect an external antenna, you only need to connect 2 OR resistor (you need to change the OR resistor position yourself).
- 3. OR resistors can only be placed in positions ①or ②, respectively, corresponding to the use of different antennas, not at the same time!