

## ESP32-CAM Include ESP32-CAM-MB 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](mailto:help@aokin.vip), we will do our best for you.

From this link: <https://github.com/aokindiy/document> can get this ESP32-CAM Include ESP32-CAM-MB help instruction electronic document.

### Connect the cables:

If you need drivers, please Install CH340 drivers.

Use the Micro USB cable to connect the PC and the ESP32-CAM-MB board, and confirm the COM port of the chip from the Windows Device Manager.

For make WiFi and Bluetooth functions are working great. It's important to ensure the boards have sufficient power when using WiFi or BT, **so be sure to use a USB port on your PC or a powered hub, and not an unpowered hub.**

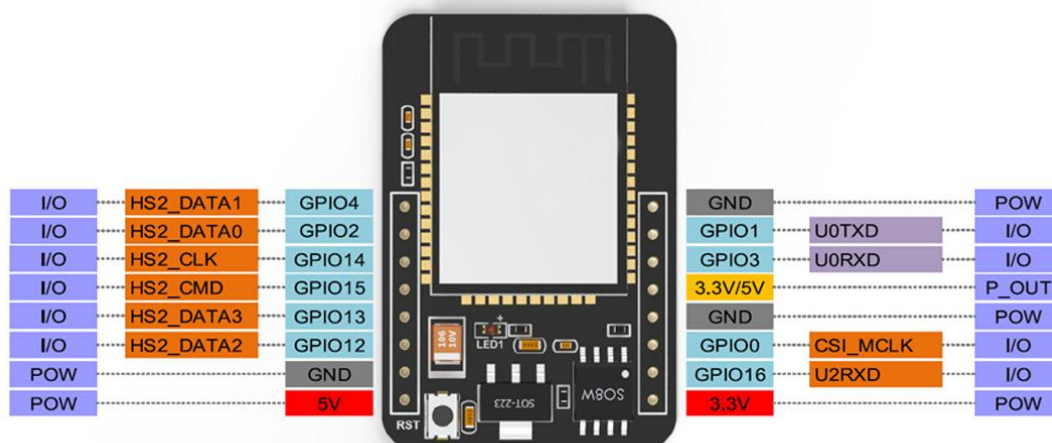
**Note: MAKE SURE YOUR USB CABLE IS FOR DATA, NOT ONLY CHARGING!**

Product use reference link, hope it can help you:

<https://dronebotworkshop.com/esp32-cam-intro>

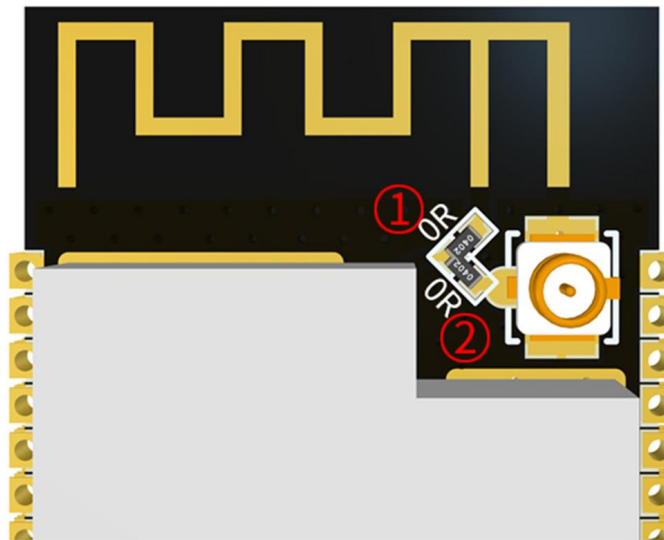
Note:

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, please 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 ① or ②, respectively, corresponding to the use of different antennas, not at the same time!