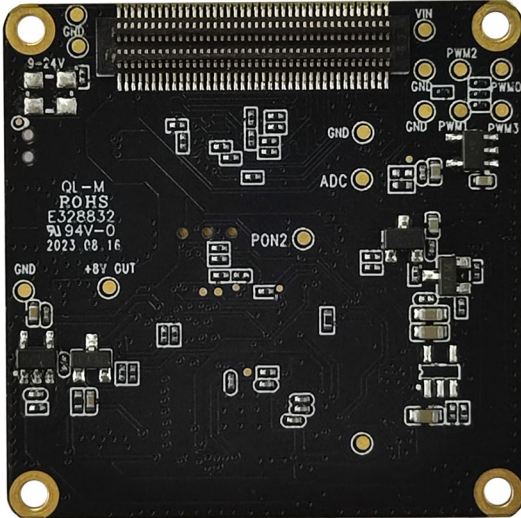
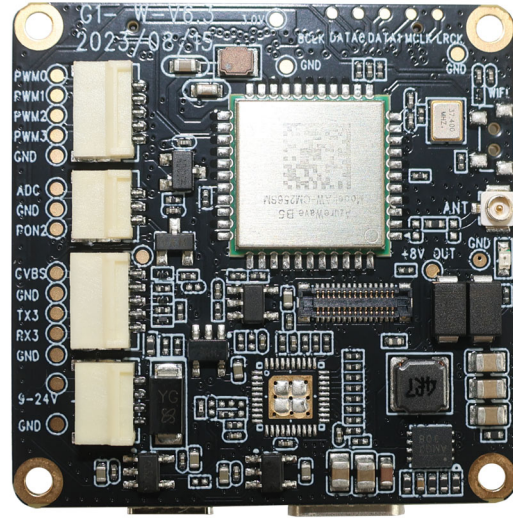


## YDS-G1WF V6.3 WiFi Expansion Board



Front View



Back View

### Overview

WiFi expansion board is equipped with the AW CM256SM single-pass dual-band WiFi module, which supports the use of single-band 2.4GHz or 5GHz wireless WiFi functions. The board supports WiFi antenna, reserved WiFi button (Button C), serial port (UART3), etc.

PWM, ADC button, touch screen and other expansion interfaces included. The board PCB size is 38x38mm, and it must be used with our company's designated master board. This WiFi board can not work independently.



## YDS-G1WF V6.3 WiFi Expansion Board

### Specifications

<b>Model No.</b>	<b>YDS-G1WF V6.3</b>
<b>WiFi Module</b>	AW CM256SM
<b>Power Supply</b>	Supports 3 Power Supply Methods At The Same Time (1) 5V USB to Type-C Port Power Supply (2) 9V-24V WiFi Board Power Supply (3) 6.8V-8.4V Battery Power Supply (The 3-Axis Gimbal Version Does Not Support 5V USB)
<b>WiFi Frequency Bands</b>	2.4GHz or 5GHz (Dual Band Single Channel)
<b>Wireless Network Standards</b>	IEEE 802.11B/G/N/AC, WiFi Compliant
<b>2.4GHz Frequency Range</b>	2.400GHz - 2.472GHz (2.4GHz ISM Band)
<b>2.4GHz Channels</b>	2.4GHz: Channel 1 - Channel 13
<b>2.4GHz Transmission Rate</b>	2 - 3 Megabytes
<b>2.4GHz Transmission Distance</b>	50 Meters (No Disruption)
<b>5GHz Frequency Range</b>	5.150GHz - 5.825GHz (5GHz ISM Band)
<b>5GHz Channels</b>	5GHz: Channel 1 - Channel 13
<b>5GHz Transmission Rate</b>	6 - 8 Megabytes
<b>5GHz Transmission Distance</b>	30 Meters (No Disruption)
<b>CVBS (TV-Out)</b>	720 x 576
<b>CVBS Standards</b>	NTSC / PAL (TV-Out)
<b>Serial Port / UART</b>	RX3, TX3, GND
<b>ADC Button</b>	Up, Down, Left, Right, OK 5-Way ADC Buttons Power Button
<b>Operating Temperature</b>	-10°C to +60°C Without Housing
<b>Storage Temperature</b>	-20°C to +80°C
<b>Humidity</b>	20% to 80%
<b>PCB Dimensions</b>	38 x 38 mm
<b>PCB Screw Hole Spacing</b>	34 mm
<b>PCB Screw Hole Diameter</b>	2 mm
<b>Extendable Functions</b>	PWM, ADC Buttons, WiFi Board Power Supply UART3 Serial Port, Touch Screen, Other Interfaces

## YDS-G1WF V6.3 WiFi Expansion Board

### Hardware Interface Function Description

AW CM256SM single-pass dual-band WiFi module supports single-band 2.4GHz or 5GHz wireless WiFi function, and adopts the first generation IPEX universal copper standard antenna.

In the video mode standby state, long press the master board Button B, that is, long press the motherboard shooting button for 3S to turn on WiFi. The red light flashes when WiFi is turned on, and the red light is always on after the connection is successful.

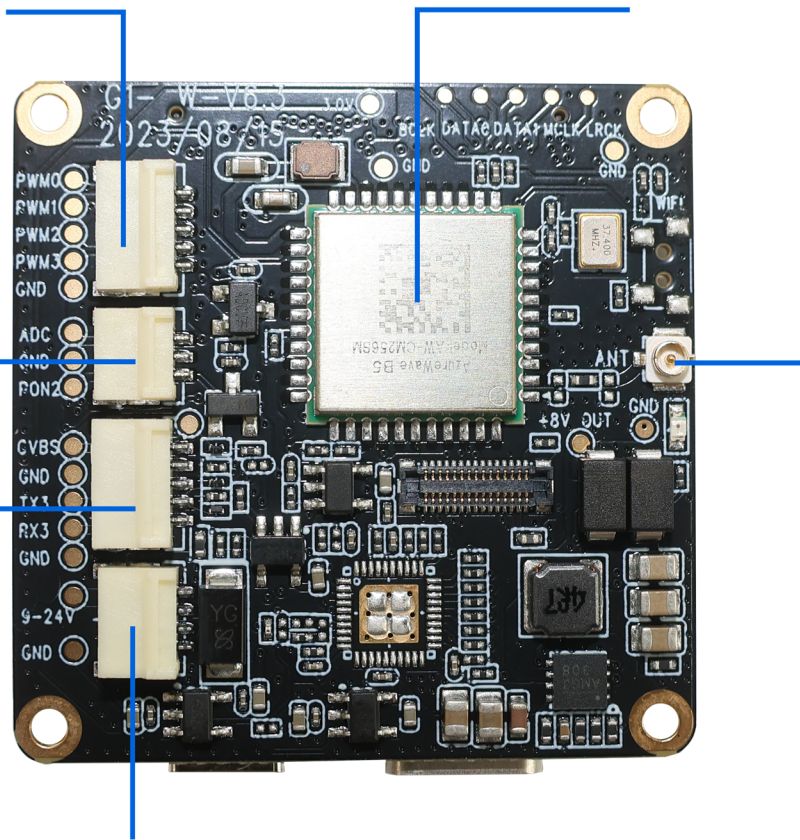
**PWM接口**  
PWM port

**无线WiFi模组**  
WiFi Module

**ADC  
5向按键**  
ADC Five Keys

**控制串口**  
Control  
(uart) port

**WiFi天线**  
WiFi Antenna

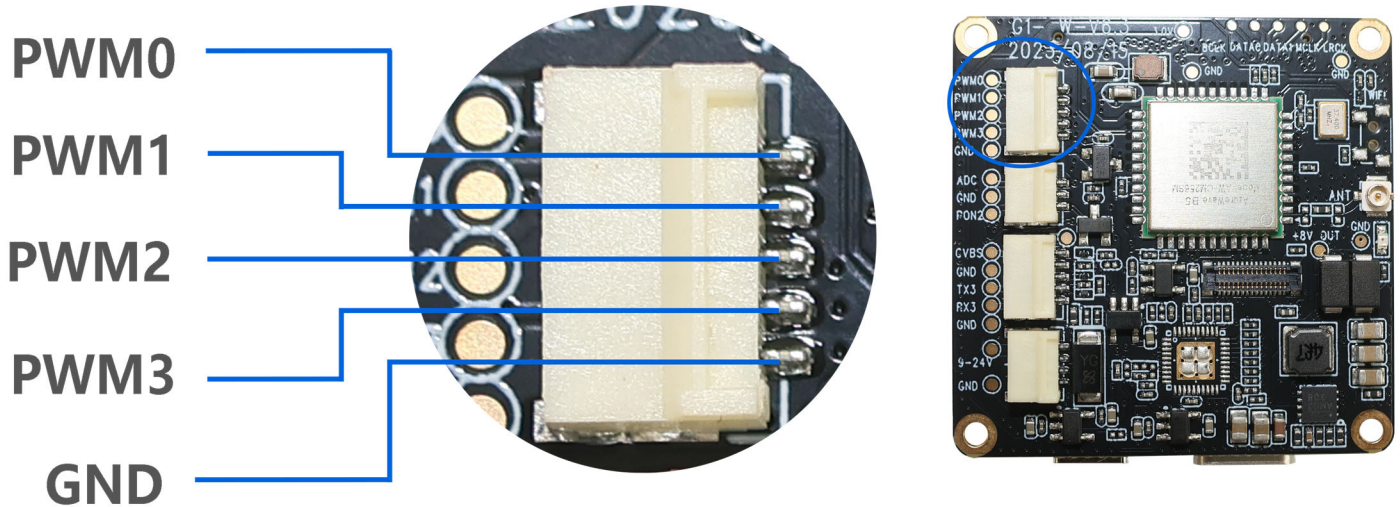


### 9~24Vwifi板上电控制相机开机

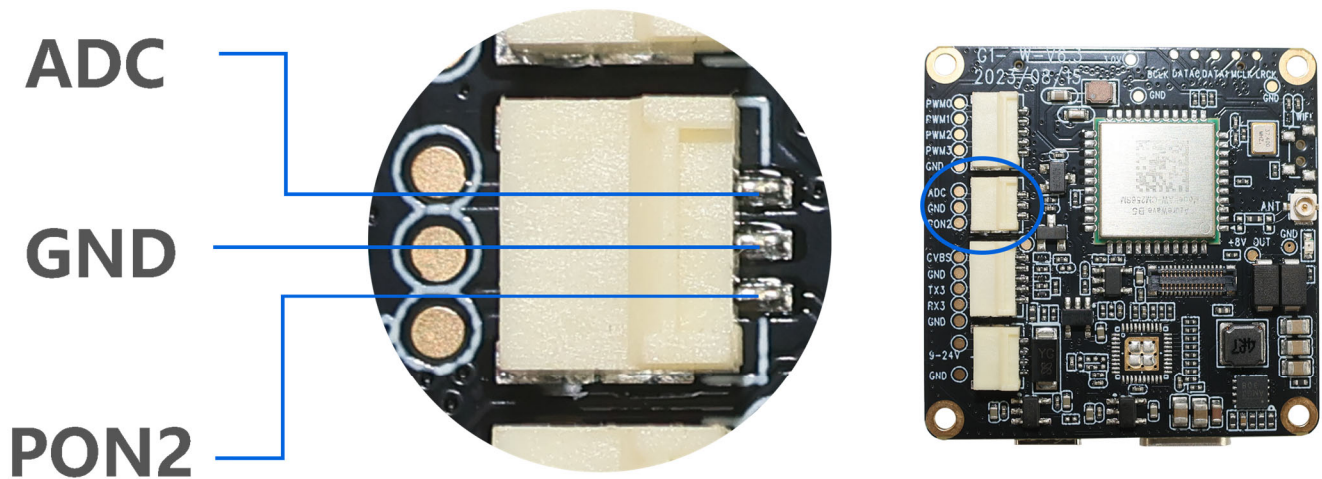
The wifi board power supply control camera is turned on

## YDS-G1WF V6.3 WiFi Expansion Board

The PWM function interface, which can be used to control camera mode switching, photo taking, video recording and other functions.

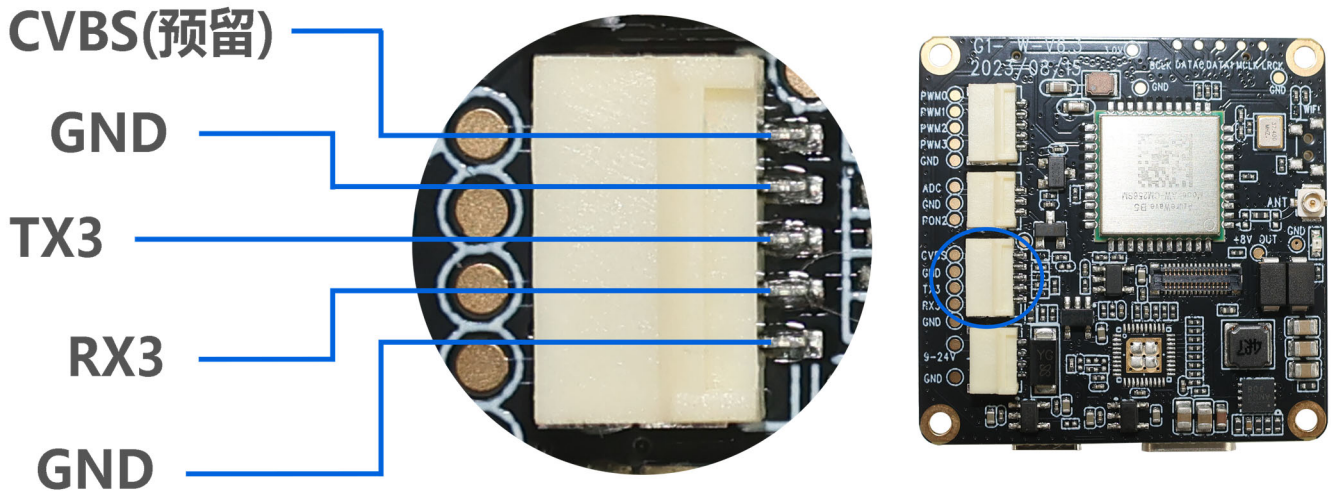


Supports one ADC button interface, which can be connected to five buttons: up, down, left, right, and OK, to control the camera's recording, taking pictures, turning on WiFi, etc. Supports external buttons to control the camera's power on and off.

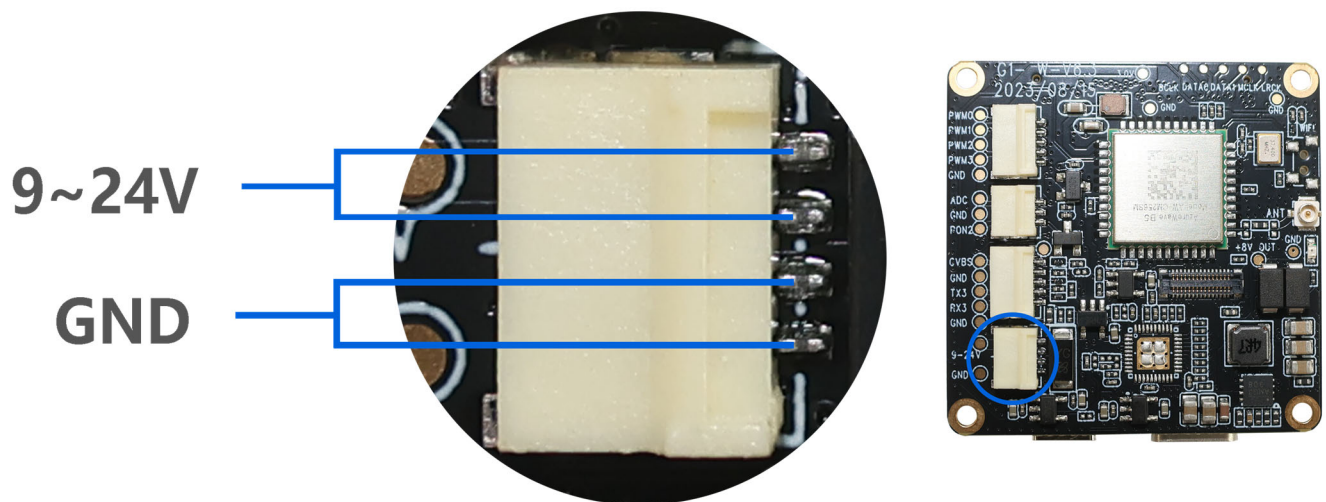


## YDS-G1WF V6.3 WiFi Expansion Board

Supports one analog video CVBS (TV-OUT) signal output, with RX3 and TX3 reserved ports, and the camera can be set and controlled through this serial port.



The camera can be powered on automatically using 9V-24V power supply; the master board supports three-way simultaneous use, namely WiFi board power supply, motherboard battery power supply, and Type-C USB power supply. It can also be used with a single power supply.



## YDS-G1WF V6.3 WiFi Expansion Board

Special note:

The three-axis gimbal does not support 5V USB power supply alone. The battery power supply can support up to 12V; but this does not include the gimbal version, the stable power supply voltage of the battery for gimbal version is 8V.

## wifi板连接主板扩展板接口

wifi board connect to main board

