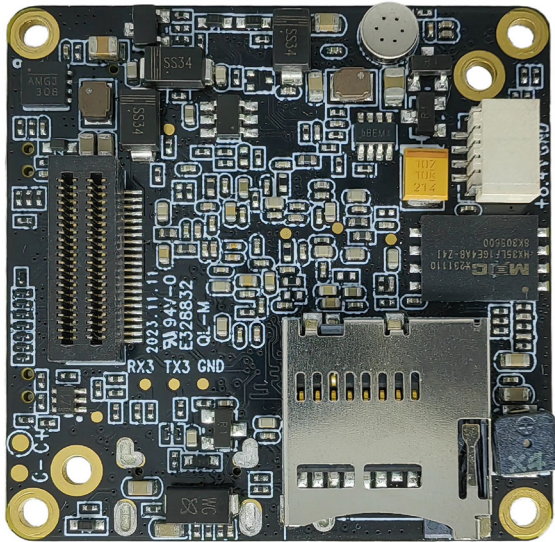
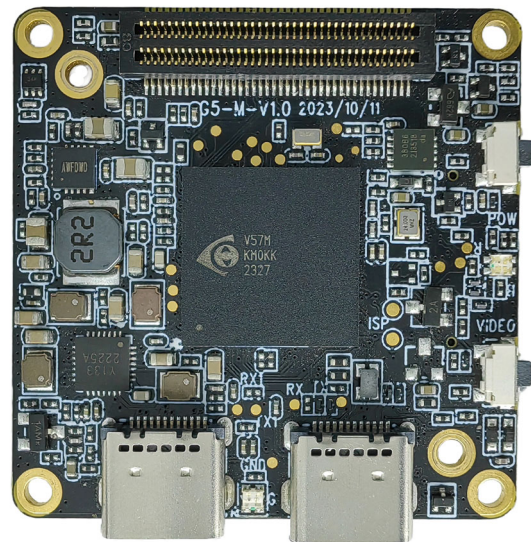


**YDS-G5M7 V1.0****iCatch V57 Ai-Powered Image Processing SoC Master Board**

Front View



Back View

**Overview**

Equipped with iCatch V57, built-in 2GB DDR3, supports up to 4K@60FPS (differential), 4K@30FPS, 1080P@120FPS H.264 encoded video. Onboard support for Type-C, TF memory card, video recording, 2 control buttons, buzzer, battery power supply, etc.

This master board extension also supports HDMI, WiFi, display, CVBS, lens camera module, UART, I2C, SPI, MIC and other expansion interfaces. The board size is 38x38mm. Widely used in drones, mini DV, wearable devices, sports cameras, face recognition, USB cameras and other camera products.



## YDS-G5M7 V1.0

### iCatch V57 Ai-Powered Image Processing SoC Master Board

#### Hardware Specifications

<b>Model No.</b>	<b>YDS-G5M7 V1.0</b>
<b>Main Control Chipset (DSP)</b>	iCatch V57
<b>Image Sensor Interface</b>	MIPI
<b>Battery Voltage</b>	7.4V - 7.7V High Voltage Lithium Battery
<b>Storage Type</b>	External TF Card, Supports 8GB - 512GB Class 10 and Above, U3 is Recommended
<b>Type-C Port</b>	Type-C USB 5V Connection to Computer USB Mode Connection to PCCAM (Camera) Mode Type-C 2.0 Interface, Type-C 3.0 Interface
<b>LED Indicator Type</b>	Three Color Light (Red, Green, Blue)
<b>2 Control Button Type</b>	Power Button (A), OK Button (B)
<b>Power Supply</b>	Supports 2 Power Supply Methods At The Same Time (1) 5V USB to Type-C Port Power Supply (2) 6.8V-8.4V Battery Power Supply
<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>	External (34mm x4), Internal (28mm x2)
<b>PCB Screw Hole Diameter</b>	2 mm
<b>Optional Camera Configuration</b>	(1) YDS-G5M7 V1.0 + Camera (2) YDS-G5M7 V1.0 + Camera + YDS-G5WF V6.3 WiFi Board (3) YDS-G5M7 V1.0 + Camera + YDS-G5NK V6.3 Ethernet Board
<b>Supportive Image Sensors</b>	48MP: IMX586
<b>Optional Extension Ports</b>	WiFi, Camera Module, UART, I2C, SPI, IO etc.
<b>Video Resolution</b>	4K @ 30FPS
<b>Photo Resolution</b>	48M (8032x6088) 12M (4000x3000) Default

## YDS-G5M7 V1.0

### iCatch V57 Ai-Powered Image Processing SoC Master Board

#### USB Type-C Interface:

This interface supports USB standard 5V power input, which can power the master board and charge the battery (recommended 7.4V-7.7V battery). Connecting to a computer can directly read files in the TF card and use it as a USB flash drive. It can also be used as a PCCAM USB camera.

The USB interface retains one camera control serial port UART3 and one camera debugging serial port UART1 (the serial port function can be used with the G5-USB serial port debugging board).

#### Connecting to the Computer USB Flash Drive Mode:

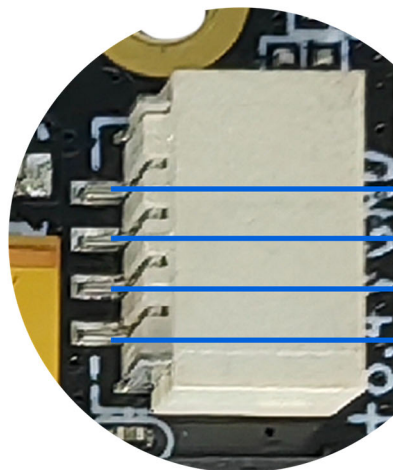
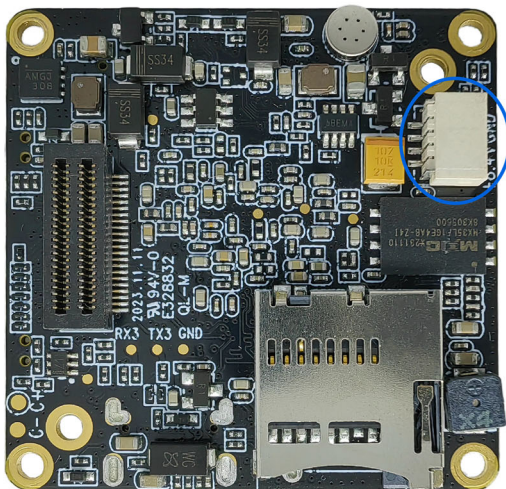
Insert the TF card, connect the other end of the USB to the computer, and automatically enter the USB flash drive mode after booting by default.

#### Connecting to the Computer PCCAM Mode:

Insert the TF card, connect the other end of the USB to the computer, and automatically enter the USB flash drive mode after booting. Short press the OK button (A) to switch to PCCAM camera mode. (Right-click the computer "Computer", click the left button in the pop-up prompt box to enter "Management", "Device Manager", and you can see the name of the camera identified in "Image Device" camera. Open the camera tool "amcap.exe" to see the current device preview screen).

#### Charge the Battery:

Use a power adapter (5V2A recommended) to charge the battery of the machine. The red light will be on during charging and the green light will be on when fully charged.



BAT-

BAT+

Battery 7.7V-8.8V  
电池供电



## YDS-G5M7 V1.0

### iCatch V57 Ai-Powered Image Processing SoC Master Board

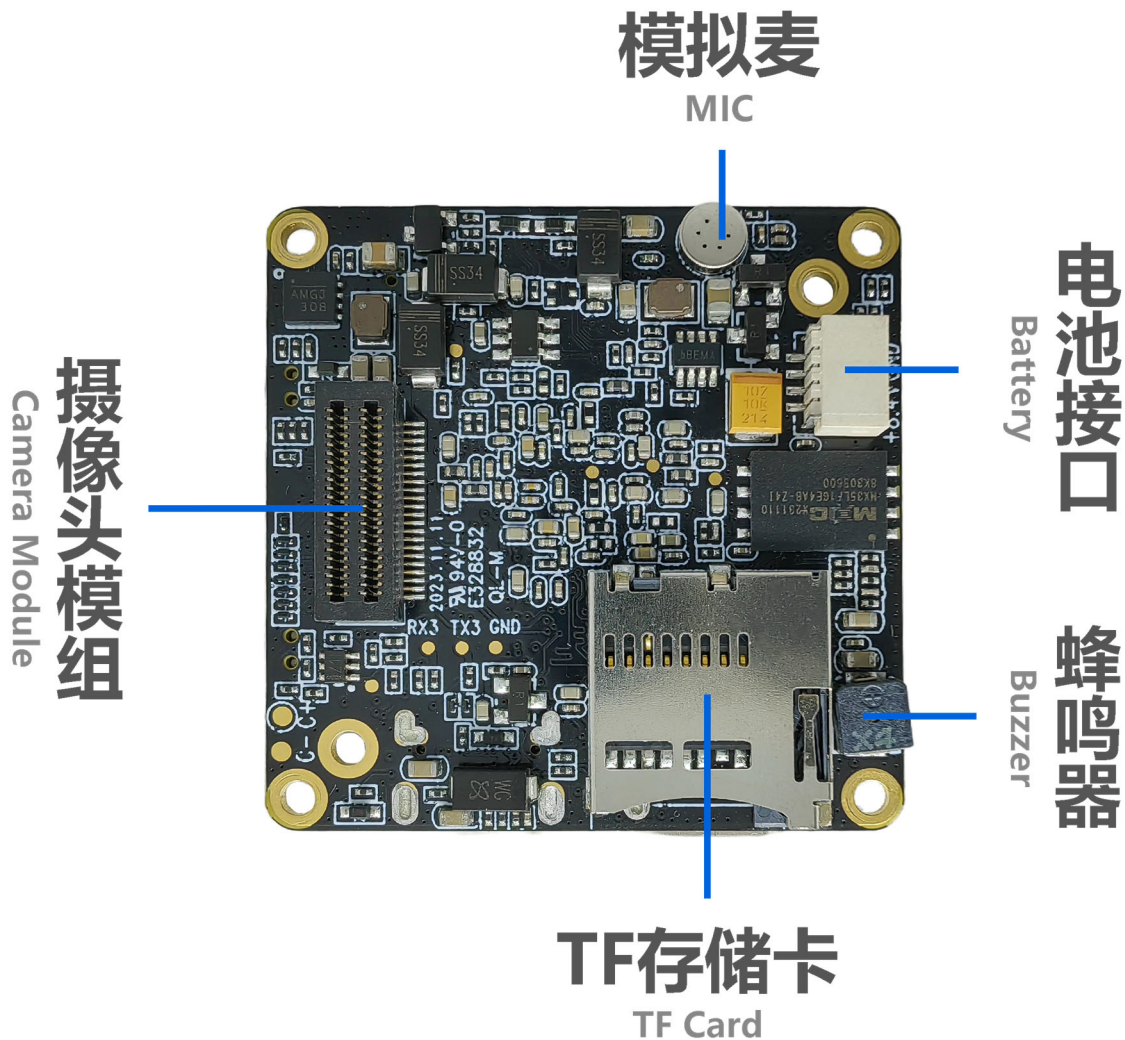
#### Type-C USB 3.0:

Type-C USB 3.0 interface, connected to a computer with USB 3.0 port, can achieve high-speed data transmission function. (To be added by software)

#### Camera Module:

This interface can be used to expand multiple MIPI sensors, IR-CUT functions, custom I/O interface functions, battery power output, and other functions.

Some camera modules can be used with coaxial cable extended connection via the YDS-G1CA V1.0 adapter plate, which is convenient for users to assemble flexibly.



## YDS-G5M7 V1.0

### iCatch V57 Ai-Powered Image Processing SoC Master Board

#### Battery Power Supply:

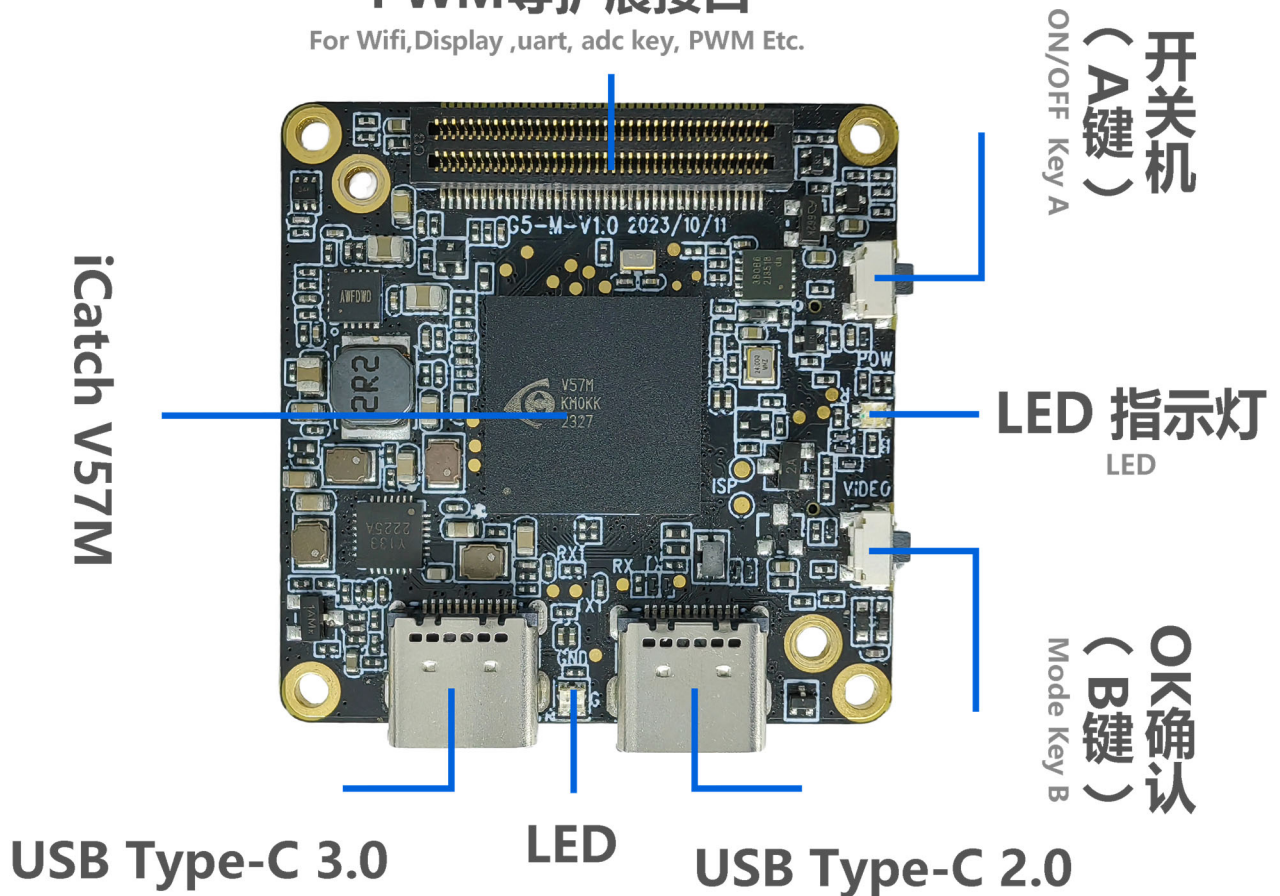
6.6V (low power shutdown) to 8.8V, 7.4-7.7V high-voltage and high-density batteries are recommended.

#### LED Indicator Description:

Functions	Color	Power On	Video Mode	Video Recording	Photo Mode	Photo Snapshot
LED Indicator	Red	Always On	Always On	Flashing		
	Green				Always On	Flash Once
	Blue					

### Wifi、显示屏、uart、ADC按键、PWM等扩展接口

For Wifi, Display, uart, adc key, PWM Etc.





## YDS-G5M7 V1.0

### iCatch V57 Ai-Powered Image Processing SoC Master Board

#### Button Instructions:

Button	Mode or Status	Functional Operation
<b>Button A</b> Power Mode	Power ON / OFF	Long Press 1 Second Power ON / OFF
	Standby	Short Press on Switch Mode Video Recording, Snapshot
<b>Button B</b> Confirmation OK Video Recording	Standby	In Video Recording Mode, Short Press to Start Recording In Snapshot Mode, Short Press to Start Taking Photo
	Shutdown	Press and Hold to Enter the USB Burning Mode