KLT-G5M7 V2.0
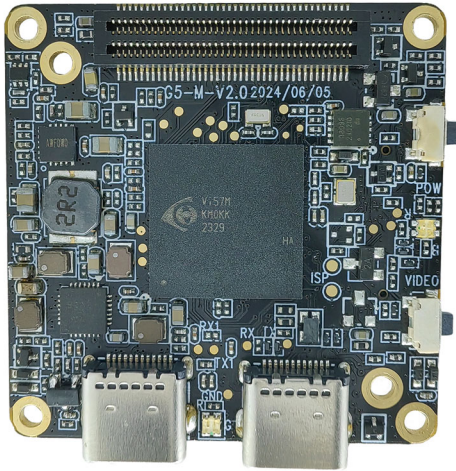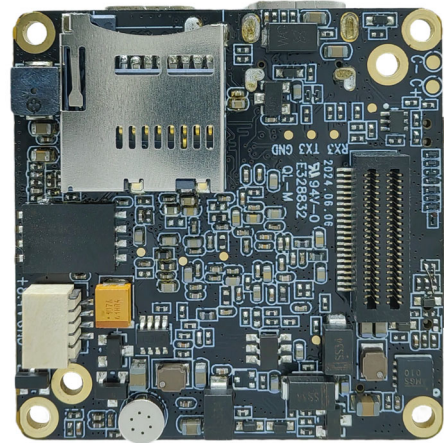## iCatch V57 Ai-Powered Image Processing SoC Master Board

Front View

Back View

Overview

Equipped with iCatch V57, built-in 2GB DDR3, supports up to 4K@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 WiFi, display, CVBS, lens camera module, UART, I2C, SPI, PWM, 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.

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iCatch V57 Ai-Powered Image Processing SoC Master Board

Hardware Specifications

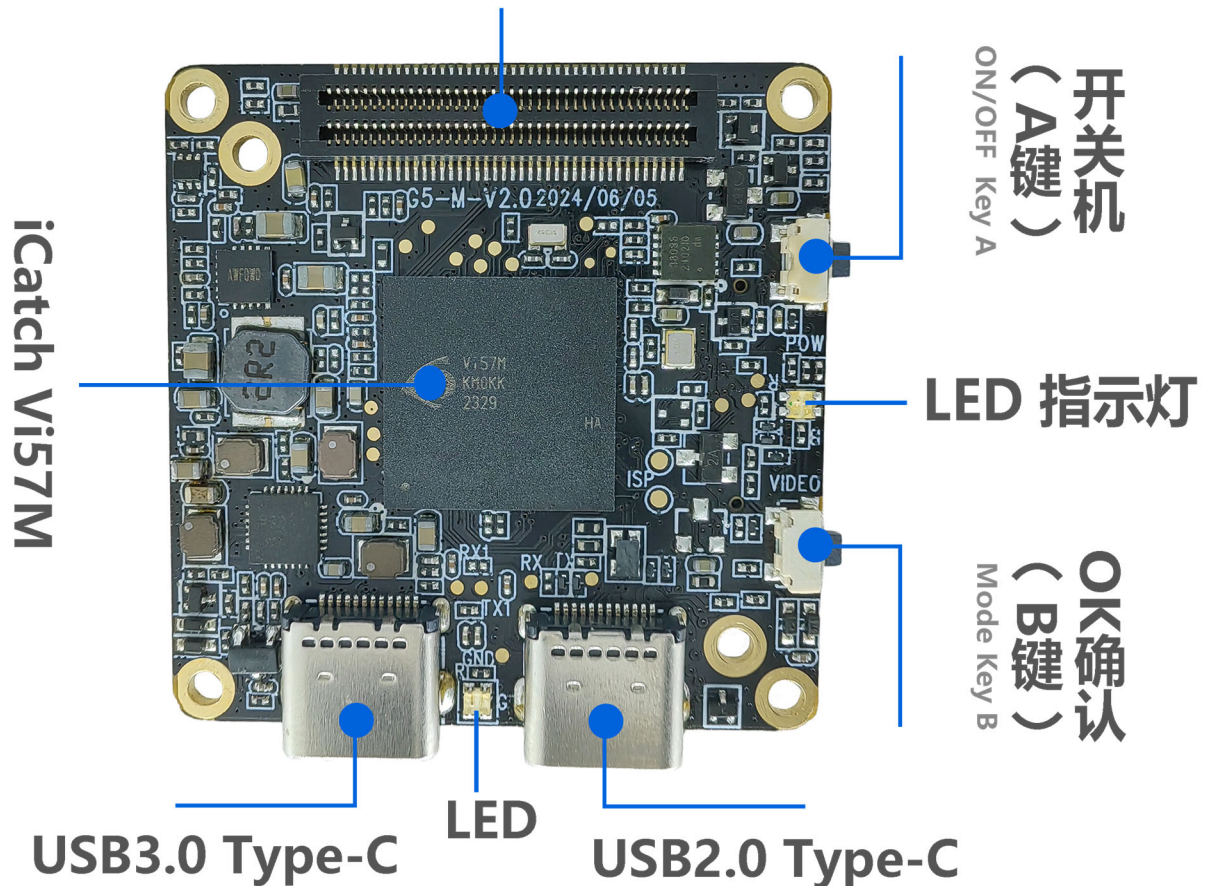| Model No.	KLT-G5M7 V2.0
Main Control Chipset (DSP)	iCatch V57
Image Sensor Interface	MIPI
Battery Voltage	7.4V - 7.7V High Voltage Lithium Battery
Storage Type	External TF Card, Supports 8GB - 512GB Class 10 and Above, U3 is Recommended
Type-C Port	Type-C USB 5V Connection to Computer USB Mode Connection to PCCAM (Camera) Mode Type-C 2.0 Interface, Type-C 3.0 Interface
LED Indicator Type	Three Color Light (Red, Green, Blue)
2 Control Button Type	Power Button (A), OK Button (B)
Power Supply	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
Operating Temperature	-10°C to +60°C Without Housing
Storage Temperature	-20°C to +80°C
Humidity	20% to 80%
PCB Dimensions	38 x 38 mm
PCB Screw Hole Spacing	External (34mm x4), Internal (28mm x2)
PCB Screw Hole Diameter	2 mm
Optional Camera Configuration	(1) KLT-G5M7 V2.0 + Camera (2) KLT-G5M7 V2.0 + Camera + KLT-G1WF V6.3 WiFi Board
Supportive Image Sensors	48MP: IMX586 12MP: IMX577
Optional Extension Ports	WiFi, Camera Module, UART, I2C, SPI, IO etc.

KLT-G5M7 V2.0
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Photo and Video Resolution

Video Resolution	4K@24/25/30/FPS 2.7K@24/25/30/48/50/60FPS 1080P@24/25/30/48/50/60/120FPS 720P@24/25/30/48/50/60/120/240FPS
Photo Resolution	48MP (8000x6000) 14MP (4592x3056) 12MP (4000x3000) 10MP (3648x2736) 8MP (3264x2448) 5MP (2592x1944) 3MP (2048x1536) 2MP (1920x1080)

Wifi、显示屏、uart、PWM等扩展接口

For Wifi,Display , uart,PWM Etc

开关机（A键）ON/OFF Key A

iCatch Vi57M

LED 指示灯

OK确认（B键）Mode Key B

USB3.0 Type-C

LED

USB2.0 Type-C

KLT-G5M7 V2.0

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.

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).
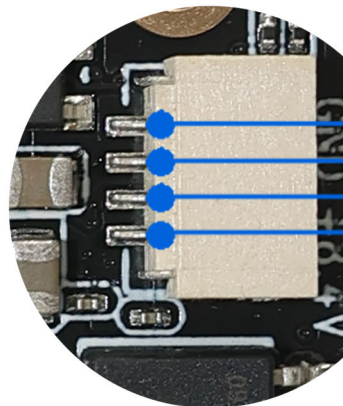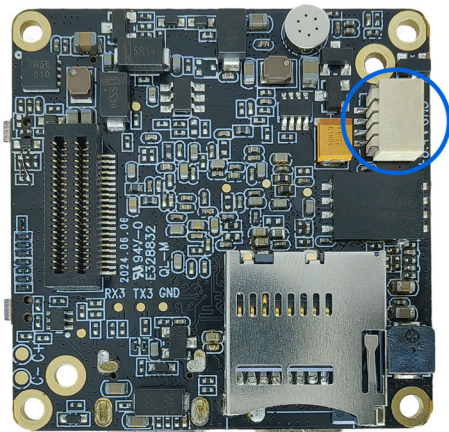
Type-C USB 2.0 and USB 3.0 Interfaces:

USB 2.0 Type-C interface: retains the camera control serial port UART3 and the camera debugging serial port UART1 (the serial port function can be used with the USB serial port debugging board).
USB 3.0 Type-C interface: connected to a computer with a USB 3.0 port, it can achieve high-speed data transmission function, greatly shortening the data transmission time.
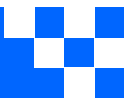
Battery Power Supply:

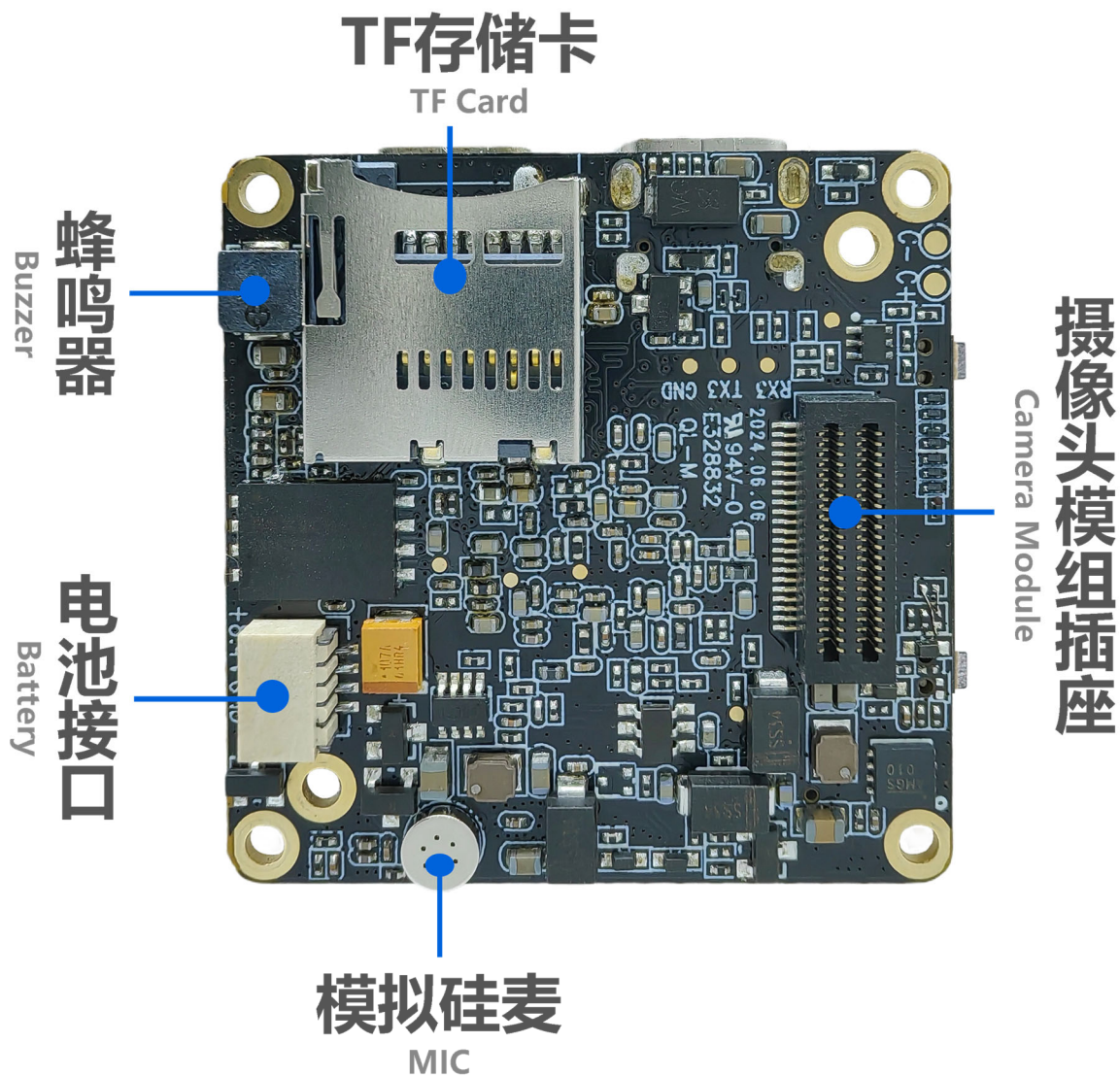6.6V (low power shutdown) to 8.8V, 7.4-7.7V high-voltage and high-density batteries are recommended.

BAT -

BAT +

Battery 7.7V-8.8V 电池供电

KLT-G5M7 V2.0
iCatch V57 Ai-Powered Image Processing SoC Master Board

Camera Module:

This interface can be used to expand multiple MIPI sensors, IR-CUT functions, LED filled light, UART2 serial port, battery power output, and other functions.

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

TF存储卡
TF Card

蜂鸣器
Buzzer

电池接口
Battery

模拟硅麦
MIC

摄像头模组插座
Camera Module

KLT-G5M7 V2.0
iCatch V57 Ai-Powered Image Processing SoC Master Board

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					

Special Note:
When the device is powered on without a TF card inserted, the function indicator light flashes yellow.

Buzzer Sound Description:

Operation Mode	Power On	Power Off	Switching Mode	Start Video Recording	Start Stop Recording	Photo Snapshot
Buzzer Sound	3 Beeps	5 Beeps	1 Beep	1 Beep	2 Beeps	1 Beep

Special Note:
In each mode, when the device presses a button, you hear the buzzer "beep" sound.

Button Instructions:

Button	Mode or Status	Functional Operation
Button A Power Mode	Power ON / OFF	Long Press 1 Second Power ON / OFF
	Standby	Short Press on Switch Mode Video Recording, Snapshot
Button B Confirmation OK Video Recording	Standby	In Video Standby Mode, Long Press 3 Seconds to Turn ON / OFF WiFi Mode. Default WiFi is OFF. 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
Reset Function	Standby or Working	Press Button A and B at the Same Time to Shutdown