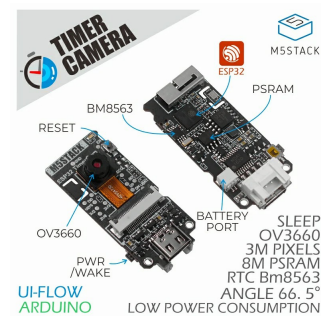


Timer Camera

SKU:U082



Tutorial&Quick-Start

Choose the development platform you want to use, view the corresponding tutorial&quick-Start.

[Camera-Tool](#) [UIFlow](#) [Arduino](#)

Description

Timer Camera is a camera module based on the ESP32 with 8MB of integrated with PSRAM. The 3 million (3MP) pixel camera (ov3660), DFOV 66.5 ° and can shoot a maximum of 2048x1536 resolution photos. There is a LED status indicator and reset button on the board. Timer Camera is designed to have ultra-low power consumption. Through the use of the RTC (BM8563), timing, sleep and wake-up functions can be utilized.

In sleep mode, the current consumption of the whole machine is only 2μA. After the scheduled photo taking function (one photo per hour) is turned on, the battery can work continuously for more than one month. The module supports WiFi image transmission and USB port debugging. The bottom HY2.0-4P port output can be connected to other peripherals. In order to facilitate DIY, the battery interface is reserved on the board. Using the M5Burner firmware burning tool, time-cam can be set directly with the Camera-Tool, and TimerCamera data can be processed in UIFlow.

The low-power power management solution adopted by the Timer Camera series is different from the CORE and StickC devices. When in use, the PWR button is used as a power-on button (long press 2s). If you need to shut down the device, you need to use the software API or press the Reset button on the PCB. When using external power supply, the device will remain powered on.



Product Features

- Design based on ESP32
- WiFi image/video transmission
- Timed sleep wake up
- Status indicator
- Ultra low power design
- Programming platform: ESP-IDF/Arduino/UIFlow

Includes

- 1x Timer Camera

Applications

- Take pictures regularly
- Remote video monitoring

USB Drive problems

TimerCAM may not work without driver in some systems. Users can manually install [FTDI driver](#) to fix this problem.

Specification

Resources	Parameter
PSRAM	8MB
Flash	4M
Image Sensor	OV3660
Maximum resolution	300w pixels
Output format	8-/10-Bit RAW, RGB and YCbCr output, compression.
Maximum image transmission rate (OV3660)	2048x1536: 15fps / 1080p: 20fps / 720p: 45fps / XGA(1024x768) : 45fps / VGA(640x480) : 60fps / QVGA(320x240) : 120fps
DFOV	66.5°
Net Weight	6g
Gross Weight	17g
Product Size	45*20*12mm
Package Size	60*60*15mm

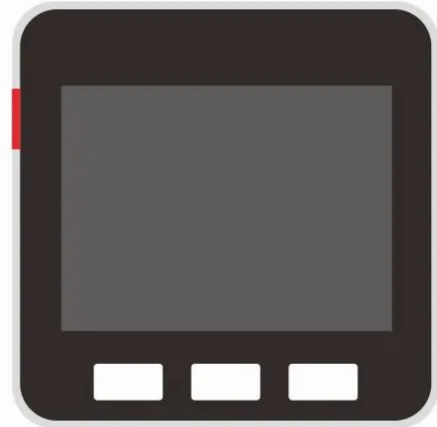
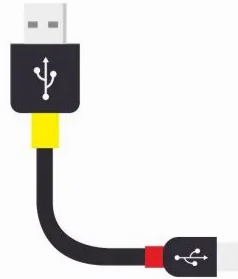
EasyLoader

EasyLoader is a concise and fast program writer, which has a built-in case program related to the product. It can be burned to the main control by simple steps to perform a series of function verification.

2, Select COM



1, Downloads



Core \ M5StickC \ M5StickV...

3, Burn Firmware

Windows MacOS

| PinMap

Camera Interface PinMap

Interface	Camera Pin	TimerCamera
SCCB Clock	SIOC	IO23
SCCB Data	SIOD	IO25
System Clock	XCLK	IO27
Vertical Sync	VSYNC	IO22
Horizontal Reference	HREF	IO26
Pixel Clock	PCLK	IO21
Pixel Data Bit 0	D0	IO32
Pixel Data Bit 1	D1	IO35
Pixel Data Bit 2	D2	IO34
Pixel Data Bit 3	D3	IO5
Pixel Data Bit 4	D4	IO39
Pixel Data Bit 5	D5	IO18
Pixel Data Bit 6	D6	IO36
Pixel Data Bit 7	D7	IO19
Camera Reset	RESET	IO15
Camera Power Down	PWDN	-1
Power Supply 3.3V	3V3	3V3
Ground	GND	GND

GROVE Interface

Grove TimerCamera

Grove TimerCamera

SCL IO13

SDA IO4

5V 5V

GND GND

LED Interface

LED TimerCamera

LED_Pin IO2

BAT Interface

BAT TimerCamera

BAT_ADC_Pin IO38

BAT_HOLD_Pin IO33

Related Link

- **datasheet**
 - [ESP32](#)
 - [OV3660](#)

Schematic

[TimerCAM_A1-ESP32_SUBSYS](#)

[TimerCAM_A2-PMS_UART](#)

Example

Arduino

- [TimerCamera-Arduino](#)

ESP-IDF

- [FactoryTest](#)
- [Ai-OSS](#)
- [Timer-Wake](#)

Firmware

You can download and burn firmware with [M5Burner](#)

Tutorial

[Use Camera-Tool](#) to take pictures

[Use HTTP Cloud Image Interface Service-UIFlow](#) to get pictures

[Use Arduino](#) development

Video

Last updated: 2020-12-14