

Stamp-AddOn Cam0308

SKU:A178



Description

Stamp-AddOn Cam0308 is a CMOS camera expansion module designed for the Stamp-S3Bat. It features a 0.3MP GC0308 image sensor and adopts an L-shaped flexible FPC cable, connecting to the mainboard via a 0.4mm-24P B2B board-to-board connector; the side of the lens is provided with a metal mounting hole. The module outputs images through an 8-bit DVP parallel interface and configures the sensor

registers via the SCCB bus, supporting QVGA (320 x 240) and VGA (640 x 480) image capture. With its compact size, the module is suitable for installation in space-constrained devices and can be used in embedded vision scenarios such as image acquisition, barcode scanning, and visual inspection.

Features

- Compatible with Stamp-S3Bat
- 0.3MP GC0308 CMOS image sensor
 - Supports QVGA (320 x 240) and VGA (640 x 480) resolutions
 - Supports YCbCr 4:2:2, RGB565, and Raw Bayer image output formats
- 8-bit DVP parallel image output interface
- SCCB configuration bus (electrically compatible with I2C)
- L-shaped flexible FPC with integrated 0.4mm-24P B2B board-to-board connector
- Side metal mounting hole for easy installation and fixation

Includes

- 1 x Stamp-AddOn Cam0308

Applications

- Embedded image acquisition
- QR code recognition
- Object contour and color detection
- Video surveillance and wireless image transmission
- IoT vision sensor node

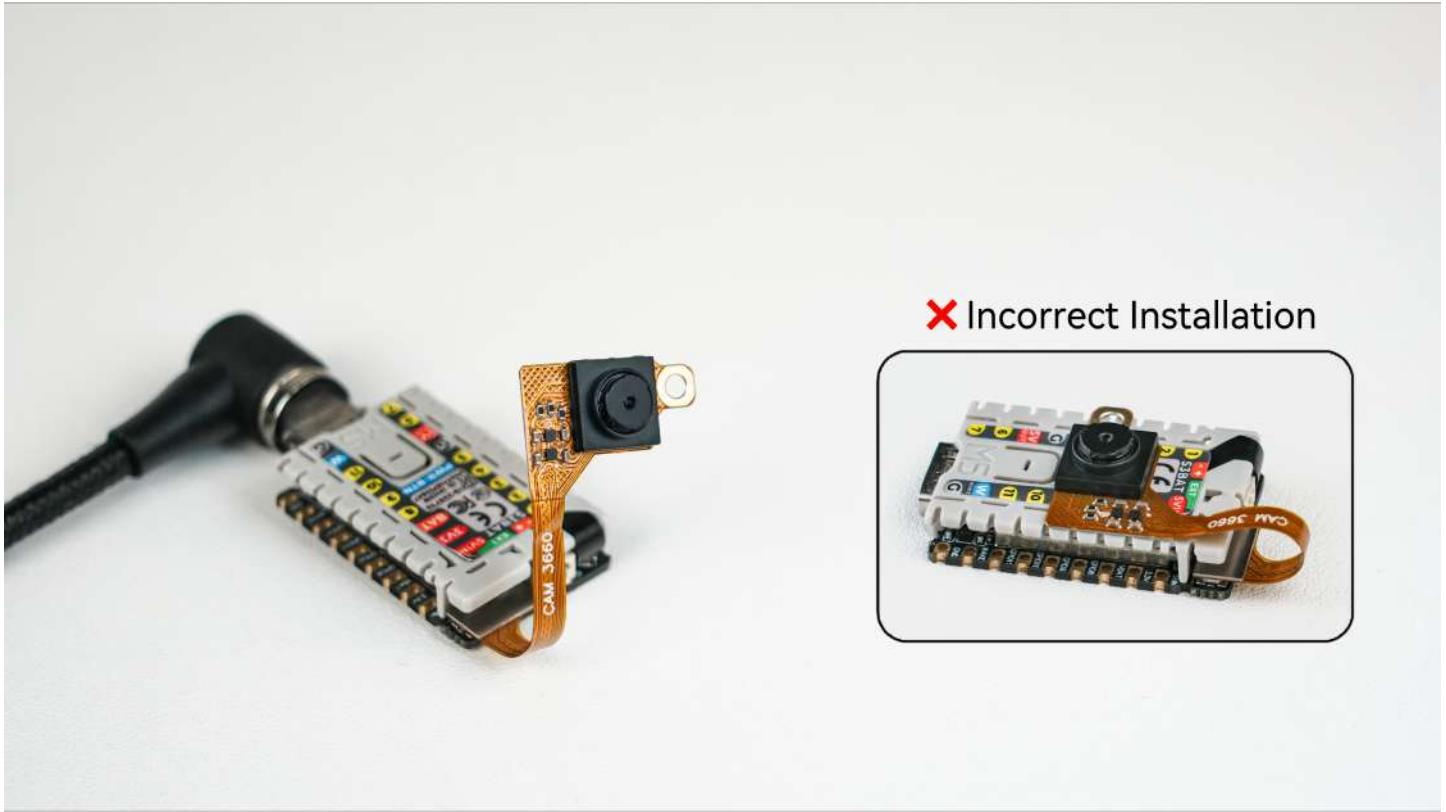
Specifications

Specification	Parameter
Image Sensor	GC0308 CMOS
Effective Pixels	0.3MP
Max Resolution	640 x 480
Lens Size	1/6.5 inch
Aperture	F2.8 ±5%
Field of View	57.6°
Distortion	<1.0%
Focus	Fixed Focus (FF)
Shooting Range	20cm ~ ∞
Supported Resolution	QVGA (320 x 240) / VGA (640 x 480)
Max Frame Rate	30fps
Output Format	YCbCr 4:2:2, RGB565, Raw Bayer
Image Output Interface	8-bit DVP parallel interface
Communication Address	I2C @0x21
Connection	0.4mm-24P B2B connector
External Clock	20MHz
Product Size	37.4 x 16.3 x 4.1mm
Product Weight	0.5g
Package Size	138.0 x 93.0 x 11.0mm
Gross Weight	3.4g

Learn

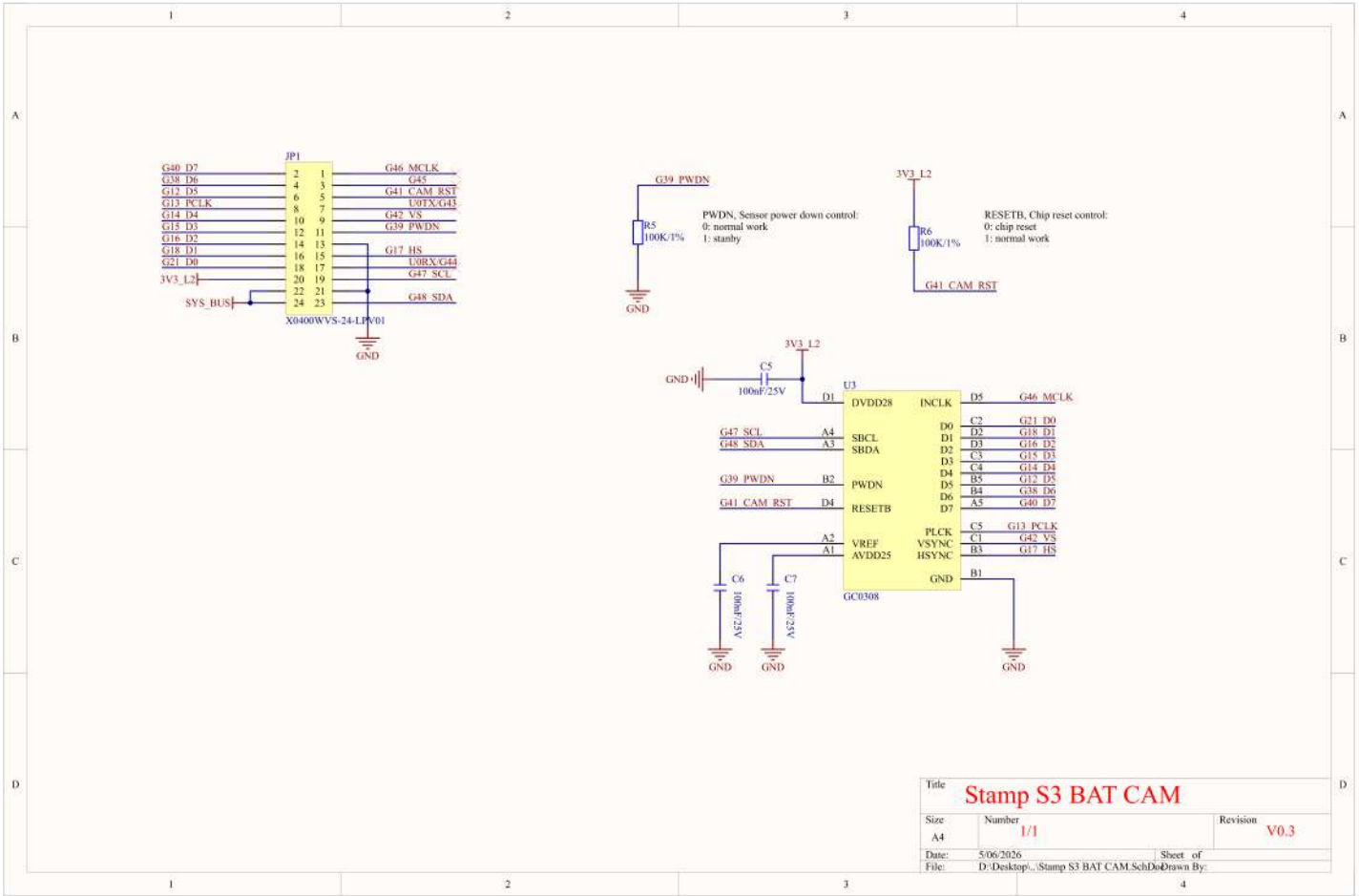
Installation Note

The camera bracket is made of metal. During installation, please do not approach or touch the FPC antenna of the **Stamp-S3Bat**, so as to avoid interfering with signal transmission and causing abnormal device operation.



Schematics

- Stamp-AddOn Cam0308 Schematic PDF

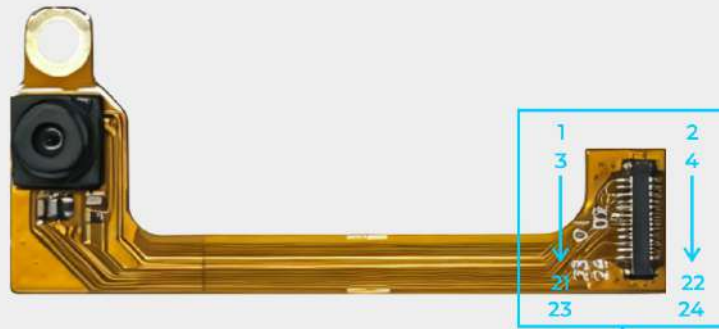




M5STACK

STAMP

AddOn Cam0308



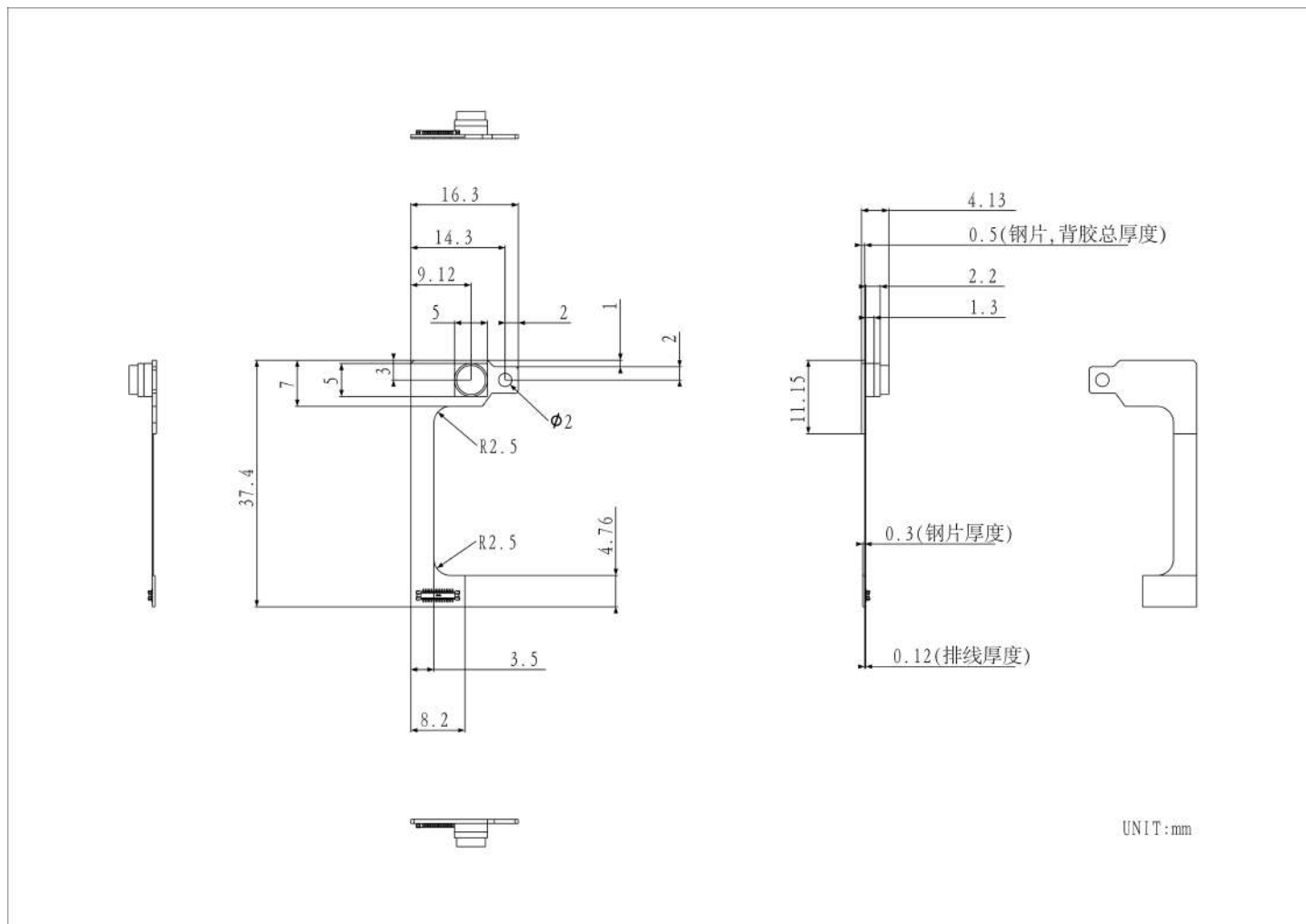
23	21									3	1
SDA	GND	SCL	NC	HS	GND	PWDN	VS	NC	RST	NC	MCLK
SYS_BUS	SYS_BUS	3V3	D0	D1	D2	D3	D4	PCLK	D5	D6	D7
24	22									4	2



EXP.B2B	Stamp-AddOn Cam0308	Stamp-S3Bat
1	MCLK	G46
2	D7	G40
3	NC	G45
4	D6	G38
5	RESET	G41
6	D5	G12
7	NC	G43
8	PCLK	G13
9	VS	G42
10	D4	G14
11	PWDN	G39
12	D3	G15
13	GND	GND
14	D2	G16
15	HS	G17
16	D1	G18
17	NC	G44
18	D0	G21
19	SCL	G47
20	3V3	3V3
21	GND	GND
22	SYS_VBUS (DC 3.7 ~ 5V)	SYS_VBUS
23	SDA	G48
24	SYS_VBUS (DC 3.7 ~ 5V)	SYS_VBUS

| Model Size

◦ [Stamp-AddOn Cam0308 Model Size PDF](#)



Datasheets

- [GC0308](#)

Softwares

Arduino

- [Stamp-AddOn Cam0308 Arduino Quick Start](#)

ESP-IDF

- [Stamp-AddOn Cam0308 UVC Example](#)
- [Stamp-AddOn Cam0308 WebServer Example](#)

Home Assistant

- [Stamp-AddOn Cam0308 ESPHome Integration](#)

Other

- [UVC Camera WebBurner](#)
- [Web Camera WebBurner](#)

Video

Product Comparison

Product Compare	<div></div>		<div></div>	
	Stamp-AddOn Cam3660		Stamp-AddOn Cam0308	
Image Sensor	OV3660 CMOS		GC0308 CMOS	
Effective Pixels	3MP		0.3MP	
Max Resolution	2048 x 1536		640 x 480	
Field of View	60°		57.6°	
Aperture	F2.0 ±5%		F2.8 ±5%	
Distortion	<1.5%		<1.0%	
Output Format	JPEG, RAW RGB, RGB565/555/444, CCIR656, YCbCr 4:2:2		YCbCr 4:2:2, RGB565, Raw Bayer	
Image Output Interface	8-bit DVP parallel interface		8-bit DVP parallel interface	
Communication Address	I2C @0x3C		I2C @0x21	