SM2V12NP

2MP MIPI Camera

www.sensing-world.com

Basic Description

This camera module uses an OmniVision 2MP Global Shutter image sensor, designed with a MIPI CSI interface and compatible with multiple SOC platforms.

Key Parameters

Sensor	2MP Sensor OG02B10
Shutter	Global shutter
Output Pixels	1600(H) x 1300(V)
Frame rate	60FPS
HDR Support	No
Output data	10bit RAW
Color / Mono	Color sensor
Power Supply	3.3V 1.8V 1.2V
Power consumption	< 0.5W
Camera interface	FPC
Connector	DIANWEI 8.03A5.021250
Operating temp.	-20 to +60℃
Storage temp.	-20 to +75℃
Dimensions	28.4*17.8*17.8mm
Weight	15g

Hardware Configuration

EEPROM	
I2C Address	0XA4

Sensor	
I2C Address	0X20

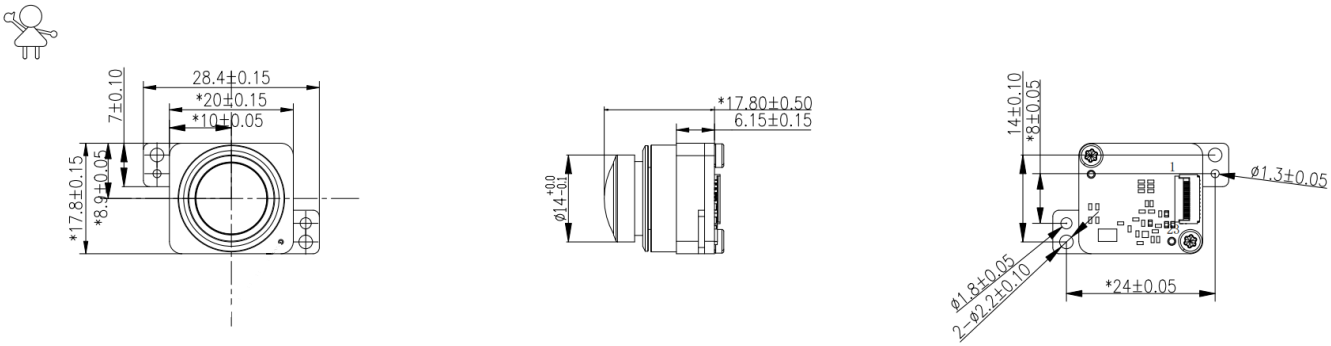
Pin Definition

NO	Pin Name	Type
1	D0_P	MIPI
2	D0_N	MIPI
3	GND	POWER
4	CLK_P	MIPI
5	CLK_N	MIPI
6	GND	POWER
7	D1_P	MIPI
8	D1_N	MIPI
9	GND	POWER
10	SDA	Level 1.8V
11	SCL	Level 1.8V
12	FSYNC	Level 1.8V
13	RESET	Level 1.8V
14	SEN_SID	Level 1.8V
15	SEN_CLK	Level 1.8V
16	EEP_SID	Level 1.8V
17	VCC-1.2V	POWER
18	VCC-1.8V	POWER
19	GND	POWER
20	GND	POWER
21	VCC-3.3V	POWER

Optical Specifications

Product Model	HFOV	VFOV	Aperture	Focal Length	Depth of Field	Lens Spec
SM2V12NP	160°	130°	F2.0	1.68mm	0.1m-INF	AA

Dimensions



Remarks:

△ The icon indicates the forward image orientation, and mirroring can be processed via software.

Dimensions

Revision History

Version	Description	Date
Rev1	First release	2026.10