SM2N2NP

2MP MIPI Camera

www.sensing-world.com

Basic Description

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

Key Parameters

Sensor	2MP Sensor AR0234
Shutter	Global shutter
Output Pixels	1600(H) x 1200(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 8.03A0.033200
Operating temp.	-20 to +60℃
Storage temp.	-20 to +75℃
Dimensions	28.4*17.8*17.7mm
Weight	15g

Hardware Configuration

EEPROM	
I2C Address	0XA4

Sensor	
I2C Address	0X20

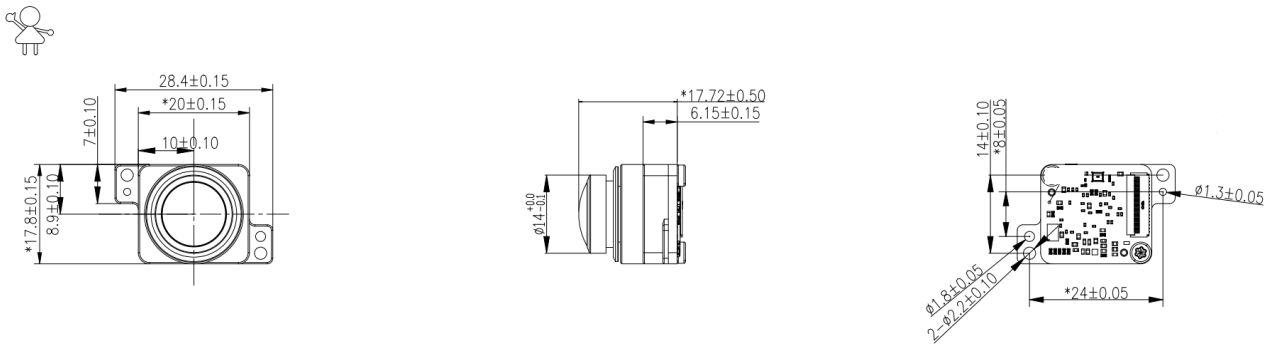
Pin Definition

NO	Pin Name	Type
1	VCC-1.2V	POWER
2	VCC-1.2V	POWER
3	GND	POWER
4	EXCLK	Level 1.8V
5	GND	POWER
6	D3_P	MIPI
7	D3_N	MIPI
8	GND	POWER
9	D2_P	MIPI
10	D2_N	MIPI
11	GND	POWER
12	CLK_P	MIPI
13	CLK_N	MIPI
14	GND	POWER
15	D1_P	MIPI
16	D1_N	MIPI
17	GND	POWER
18	D0_P	MIPI
19	D0_N	MIPI
20	GND	POWER
21	VCC-1.8V	POWER
22	Sensor-SCL	Level 1.8V
23	Sensor-SDA	Level 1.8V
24	NC	NC
25	NC	NC
26	FSYNC	Level 1.8V
27	NC	NC
28	RESETn	Level 1.8V
29	EEP_SID	Level 1.8V
30	SEN_SID	Level 1.8V
31	EEP_WP	Level 1.8V
32	GND	POWER
33	VCC-3.3V	POWER

Optical Specifications

Product Model	HFOV	VFOV	Aperture	Focal Length	Depth of Field	Lens Spec
SM2N2NP	160°	120°	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