SM1N8ASC

1MP MIPI Camera

www.sensing-world.com

Basic Description

This camera module uses an ON Semiconductor 1MP Global Shutter image sensor, designed with a MIPI CSI interface and compatible with multiple SOC platforms.

Key Parameters

Sensor	1MP Sensor AR0145
Shutter	Global shutter
Output Pixels	1280（H）x 800（V)
Frame rate	60FPS
HDR Support	No
Output data	10bit RAW
Color / Mono	Color sensor
Power Supply	2.8V 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	16*16*16.5mm
Weight	15g

Hardware Configuration

EEPROM	
I2C Address	0XA4

Sensor	
I2C Address	0X20

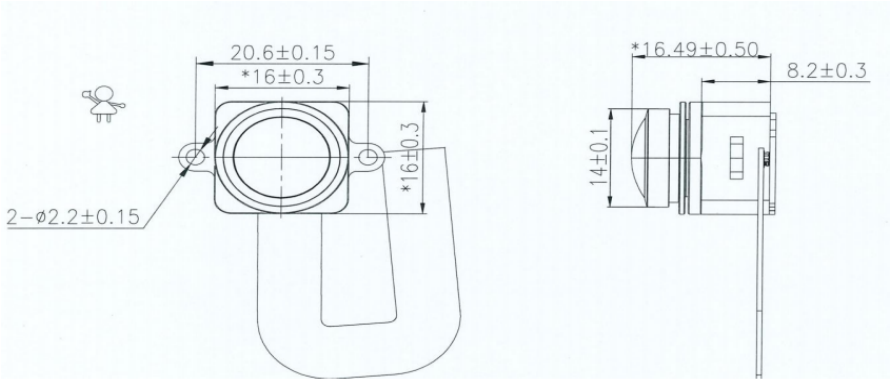
Pin Definition

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
SM1N8ASC	183°	122°	F2.0	0.95mm	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