SDN2NNP1

2MP MIPI Stereo Camera

www.sensing-world.com

Basic Description

This stereo camera module uses two 2MP Global Shutter image sensors with a 60mm baseline, designed with MIPI CSI interface.

Key Parameters

QTY Of Sensor	2
Sensor	Onsemi 2MP sensor
Shutter	Global shutter
Output Pixels	1600（H）x 1200（V）
Pixel size	3.0μm
Frame rate	60FPS
Baseline	60mm
Output data	10bit RAW
IMU	ICM45686
Color / Mono	Color sensor
Camera interface	FPC
Connector	DIANWEI 8.01A0.036200
Performance temp.	-20 to +60
Dimensions	W: 28mm, L:90mm, H:17.8mm
Weight	<30g

Hardware Configuration

EEPROM	
I2C Address	OXA0

Sensor	
Sensor1 I2C Address	OX20
Sensor2 I2C Address	OX30
Address can be changed by different RESET	

Pin Definition

NO	Pin Name
1	VCC-3.8V
2	VCC-3.8V
3	GND
4	A-D0_N
5	A-D0_P
6	GND
7	A-CLK_P
8	A-CLK_N
9	GND
10	A-D1_N
11	A-D1_P
12	GND
13	A-MCLK
14	GND
15	SCL
16	SDA
17	RESETn
18	FSYNC
19	IMU_INT
20	IMU_CLKIN
21	IMU_CS
22	IMU_MOSI-SDA
23	IMU_MISO
24	IMU_SCLK-SCL
25	GND
26	B-MCLK
27	GND
28	B-D0_P
29	B-D0_N
30	GND

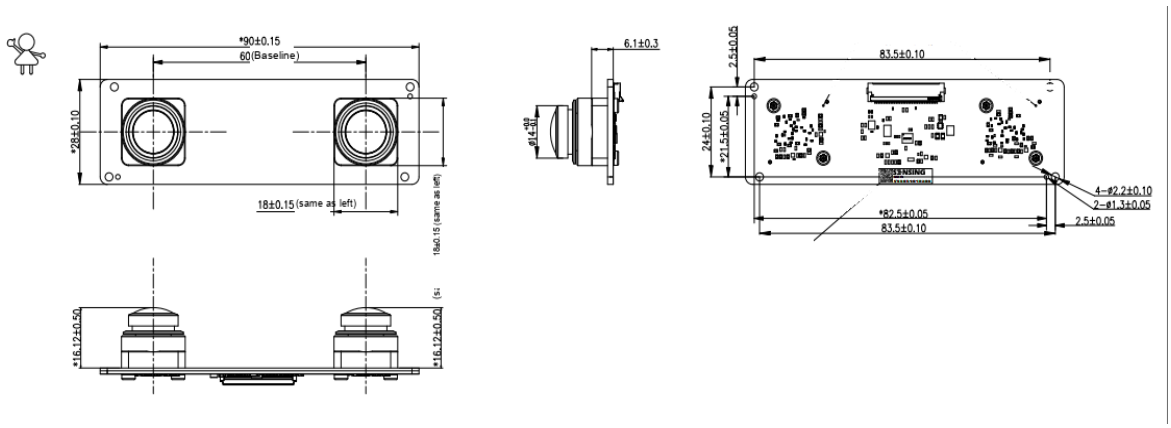
Pin Definition

NO	Pin Name
31	B-CLK_N
32	B-CLK_P
33	GND
34	B-D1_P
35	B-D1_N
36	GND

Optical Specifications

Product Model	Horizontal FOV	Vertical FOV	Aperture	Focal Length	Depth of Field	Lens Spec
CAM1	160°	120°	F2.2	2.27mm	0.28m-INF	AA
CAM2	160°	120°	F2.2	2.27mm	0.28m-INF	AA

Dimensions



The icon indicates the forward image orientation, which can be mirrored via software.

Revision History

Version	Description	Date
Rev1	First release	2026.10