



LI-IMX563-MIPI-AF



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INTRODUCTION

The LI-IMX563-MIPI-AF is equipped with Sony diagonal 7.05 mm (Type 1/2.55) 12MP CMOS image sensor IMX563 which could achieve high speed image capturing, high sensitivity and low noise image. This camera is assembled with TLens for auto focus and outputs RAW data.

SPECIFICATIONS

Sensor	Sony Diagonal 7.05 mm 12MP CMOS Sensor IMX563
Optical Format	1/2.55"
Resolution	4032 (H) x 3024 (V) (active pixels)
Pixel Size	1.4 x 1.4 μ m
Output Format	8-bit / 10-bit RAW data
Auto Focus	Supported
TLens for Auto Focus	Yes
Color / Mono	Color sensor
Maximum Frame Rate	120 fps @ full resolution 240 fps @ 4K2K 960 fps @ 1080P
Interface	4-lane MIPI CSI-2
Power Consumption	< 0.5 W
Operating Temp	-20°C ~ +70°C
Storage Temp	-30°C ~ +80°C
Weight	~ 0.4 g
Part#	LI-IMX563-MIPI-AF

- Digital Still Cameras
- PC Cameras
- IoT
- Robots

LENS SPECIFICATIONS

Effective Focal Length	3.94 mm
Aperture, F/#	1.9
FOV	82.9° diagonal
	70.4° horizontal
	55.7° vertical
TV Distortion	< 1.5%

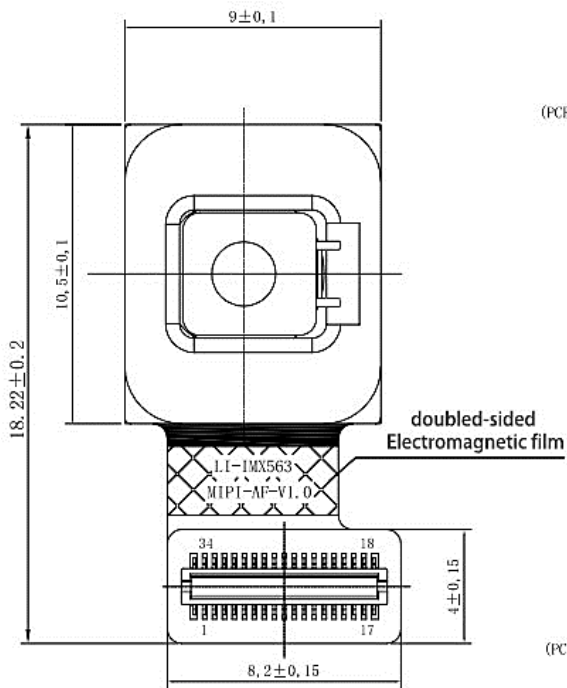


DIMENSIONS

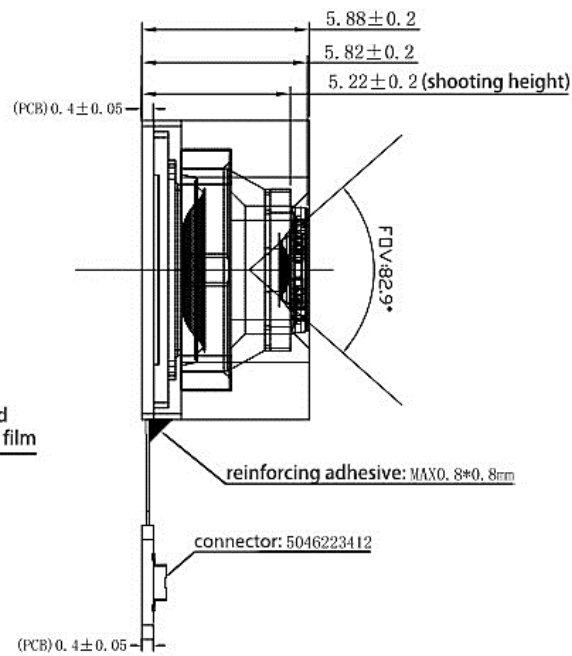


Capture Direction

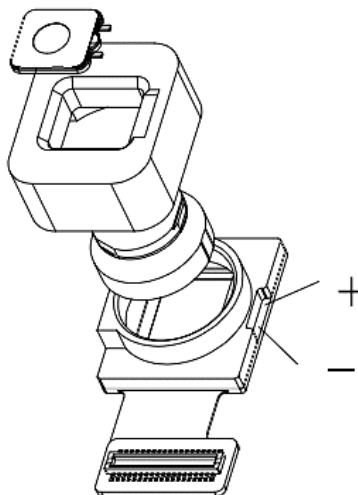
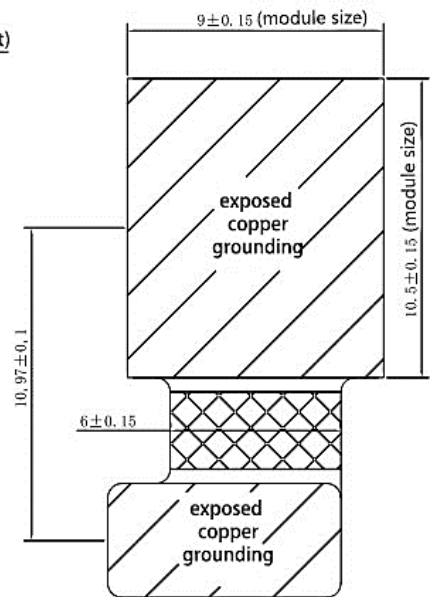
TOP VIEW



SIDE VIEW



BOTTOM VIEW



Unit: mm

PIN ASSIGNMENT

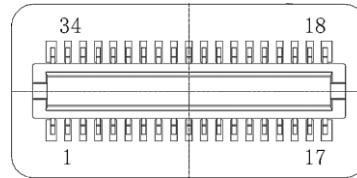
NO.	Name	I/O	A/D	Description
1	AGND	GND	A	Analog ground
2	AVDD1.8V	Power	A	VANA power supply
3	DGND	Power	D	Digital ground
4	RCLK_OUT	I	D	Clock input
5	DGND	Power	D	Digital ground
6	CAM_RST	I	D	Chip clear (pull down internal)
7	FSTROBE	O	D	Flash strobe
8	DGND	Power	D	Digital ground
9	MIPI_D0P	O	D	MIPI output
10	MIPI_D0N	O	D	MIPI output
11	DGND	Power	D	Digital ground
12	MIPI_D1P	O	D	MIPI output
13	MIPI_D1N	O	D	MIPI output
14	DGND	Power	D	Digital ground
15	MIPI_CP	O	D	MIPI output
16	MIPI_CN	O	D	MIPI output
17	DGND	Power	D	Digital ground

NO.	Name	I/O	A/D	Description
34	AGND	GND	A	Analog ground
33	AVDD2.8V	Power	A	VANA power supply
32	DOVDD1.8V	Power	D	Input / output power supply
31	AF-3.3V			Reserved
30	DVDD1.1V	Power	D	VDIG power supply
29	SLASEL	I	D	I ² C slave address select (pull-down internal)
28	CAM_SCL	I/O	D	I ² C pin
27	CAM_SDA	I	D	I ² C Pin
26	DGND	Power	D	Digital ground
25	MIPI_D3N	O	D	MIPI output
24	MIPI_D3P	O	D	MIPI output
23	DGND	Power	D	Digital ground
22	MIPI_D2N	O	D	MIPI output
21	MIPI_D2P	O	D	MIPI output
20	DGND	Power	D	Digital ground
19	NC			
18	DGND	Power	D	Digital ground

INTERFACE

Interface J1 (Connector)

- Part#: 5046223412
- Number of Positions: 34
- Number of Rows: 2
- Pitch: 0.35 mm



J1

DGND	36	36	35	DGND
AGND	1		34	AGND
AVDD1.8V	2	1	33	AVDD2.8V
DGND	3	2	32	DOVDD1.8V
RCLK_OUT	4	3	31	AF-3.3V
DGND	5	4	30	DVDD1.1V
CAM_RST	6	5	29	SLASEL
FSTROBE	7	6	28	CAM_SCL
DGND	8	7	27	CAM_SDA
MIPI_D0P	9	8	26	DGND
MIPI_D0N	10	9	25	MIPI_D3N
DGND	11	10	24	MIPI_D3P
MIPI_D1P	12	11	23	DGND
MIPI_D1N	13	12	22	MIPI_D2N
DGND	14	13	21	MIPI_D2P
MIPI_CP	15	14	20	DGND
MIPI_CN	16	15	19	XVS
DGND	17	16	18	DGND
DGND	37	17	38	DGND

5046223412

● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	17 Jul 2023

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