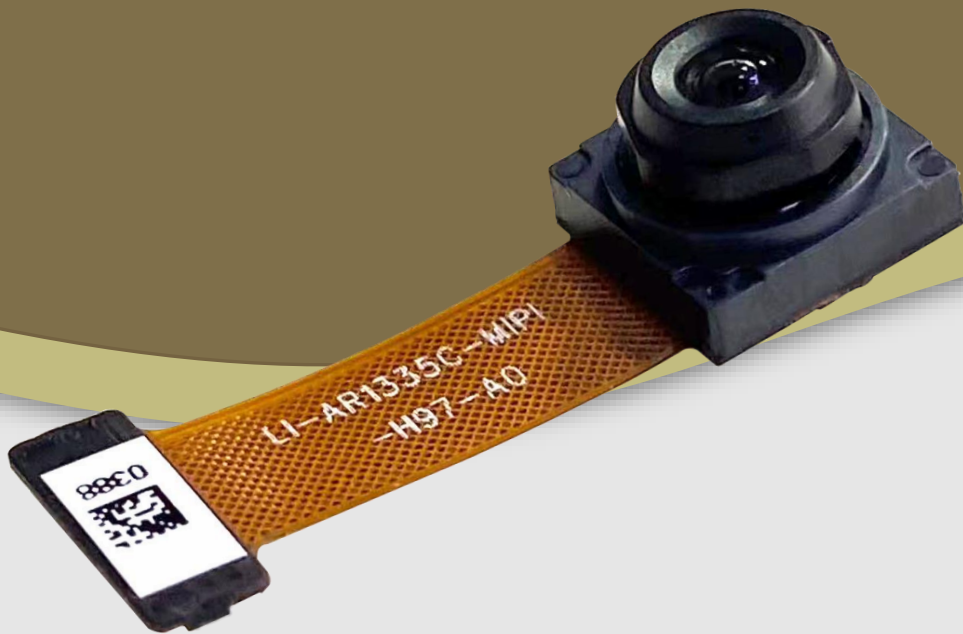




**LEOPARD**  
IMAGING

# LI-AR1335C-MIPI-097H



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## INTRODUCTION

The LI-AR1335C-MIPI-097H is equipped with ON Semiconductor 1/3.2" 13MP CMOS digital image sensor AR1335 CSP which features advanced 1.1  $\mu\text{m}$  pixel BSI technology. This camera outputs 6-bit / 8-bit / 10-bit RAW data.

## SPECIFICATIONS

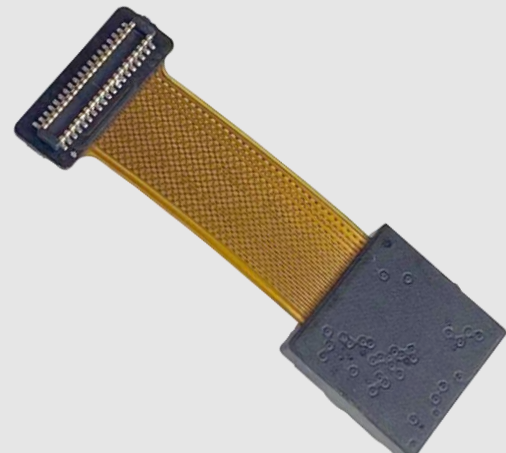
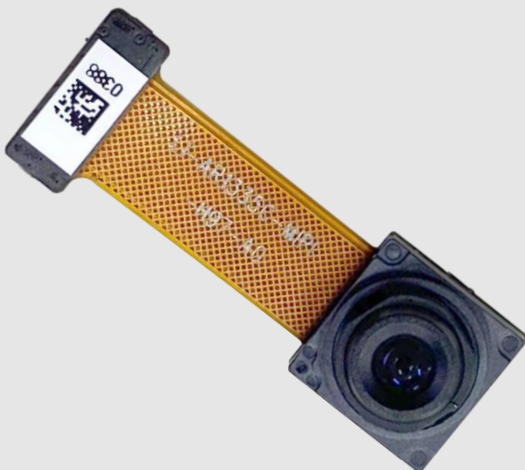
Sensor	ON Semiconductor 13MP CMOS Digital Image Sensor AR1335 CSP
Optical Format	1/3.2"
Resolution	4208 (H) x 3120 (V) (active pixels)
Pixel Size	1.1 $\mu\text{m}$ Back Side Illuminated (BSI)
Output Format	6-bit / 8-bit / 10-bit RAW data
Color / Mono	Color sensor
Maximum Frame Rate	30 fps @ 4208 x 3120
Interface	4-lane MIPI CSI-2
Power Consumption	100 mA @ 5 VDC (4208 x 3120 @ 12 fps)
Operating Temp	-30°C ~ +70°C
Storage Temp	-30°C ~ +70°C
Weight	~ 0.4 g
Part#	LI-AR1335C-MIPI-097H

## APPLICATIONS

- Digital Still Cameras
- PC Cameras
- IoT
- Robots

## LENS SPECIFICATIONS

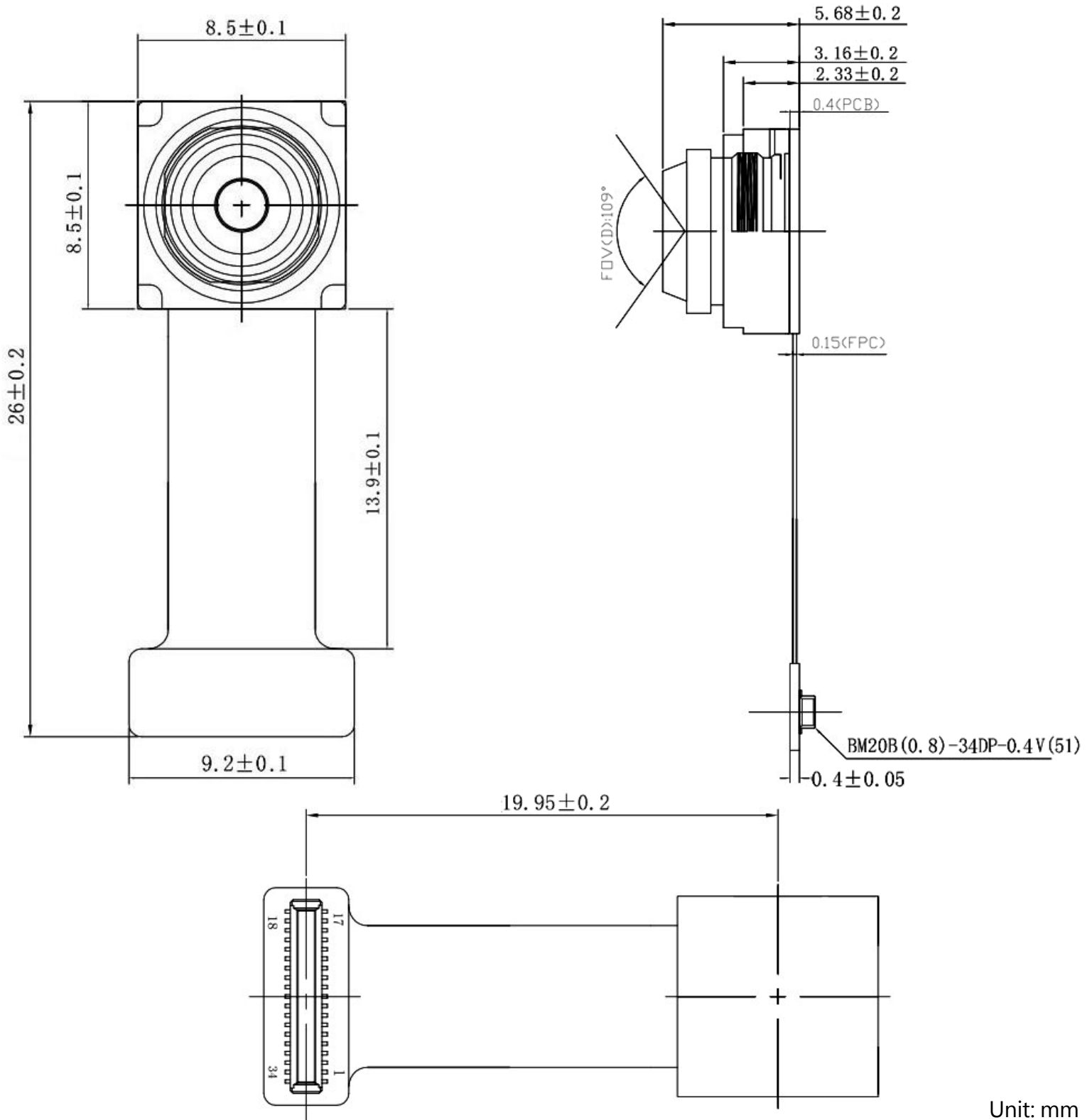
Focal Length	2.04 mm
Aperture, F/#	2.4
FOV	109° diagonal
	97° horizontal
	80° vertical
TV Distortion	< 13%
Depth of Field	0.39 (m) to infinity



# DIMENSIONS



Capture Direction



Unit: mm

## PIN ASSIGNMENT

NO.	Name	Type	Description
1	VDDIO	Supply	I/O power supply
2	NC		
3	DGND	Supply	Common ground for digital and I/O
4	DATA0_P	Output	Differential MIPI (sub-LVDS) serial data 1st lane (positive)
5	DATA0_N	Output	Differential MIPI (sub-LVDS) serial data 1st lane (negative)
6	DGND	Supply	Common ground for digital and I/O
7	CLK_P	Output	Differential MIPI (sub-LVDS) serial clock/strobe (positive)
8	CLK_N	Output	Differential MIPI (sub-LVDS) serial clock/strobe (negative)
9	DGND	Supply	Common ground for digital and I/O
10	DATA3_P	Output	Differential MIPI (sub-LVDS) serial data 4th lane (positive)
11	DATA3_N	Output	Differential MIPI (sub-LVDS) serial data 4th lane (negative)
12	DGND	Supply	Common ground for digital and I/O
13	VDDIO	Supply	I/O power supply
14	SCL	Input	Serial clock for access to control and status registers
15	GPIO	I/O	General purpose inputs and outputs
16	AGND	Supply	Analog ground
17	VAA	Supply	Analog power supply

NO.	Name	Type	Description
34	NC		
33	DGND	Supply	Common ground for digital and I/O
32	MCLK	Input	Master clock input, 6–48 MHz
31	DGND	Supply	Common ground for digital and I/O
30	DATA1_P	Output	Differential MIPI (sub-LVDS) serial data 2nd lane (positive)
29	DATA1_N	Output	Differential MIPI (sub-LVDS) serial data 2nd lane (negative)
28	DGND	Supply	Common ground for digital and I/O
27	DATA2_P	Output	Differential MIPI (sub-LVDS) serial data 3rd lane (positive)
26	DATA2_N	Output	Differential MIPI (sub-LVDS) serial data 3rd lane (negative)
25	DGND	Supply	Common ground for digital and I/O
24	DVDD	Supply	digital power supply inputs
23	DVDD	Supply	digital power supply inputs
22	SDA	I/O	Serial data from reads and writes to control and status registers
21	RESET	Input	Asynchronous active LOW reset
20	GPI2	Input	General purpose inputs
19	DGND	Supply	Common ground for digital and I/O
18	VAA	Supply	Analog power supply

- REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	15 Sep 2021
1.1	Deleted info quoted from sensor spec.	23 May 2022
1.2	Updated power consumption.	25 Nov 2022

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