
Radxa Camera 4K

For Radxa

Revision 1.1
2024-03-29



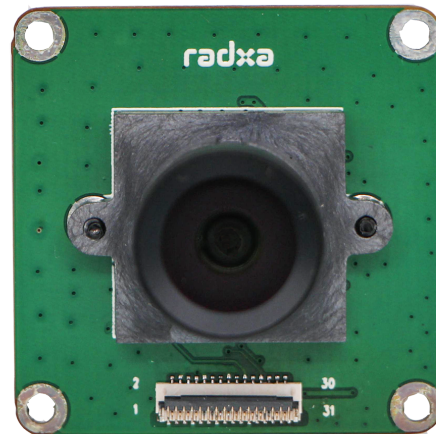
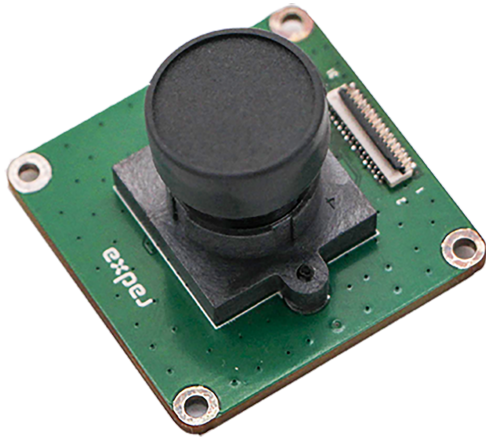
Contents

1	Revision Control Table	2
2	Overview	3
3	Specification	3
4	Physical specifications	5
5	Pin Definition	6
6	Availability	6
7	Support	6

1 Revision Control Table

Version	Date	Changes from previous version
1.0	2023-05-10	First Version
1.1	2024-03-29	Add Pin Definition

2 Overview



Radxa Camera 4K is an high resolution camera module for Radxa products powered by a Sony IMX415 image sensor with 8.29M pixels and up to 4K resolution. Radxa Camera 4K Module is capable of the following applications:

- Surveillance cameras
- FA cameras
- Industrial cameras

3 Specification

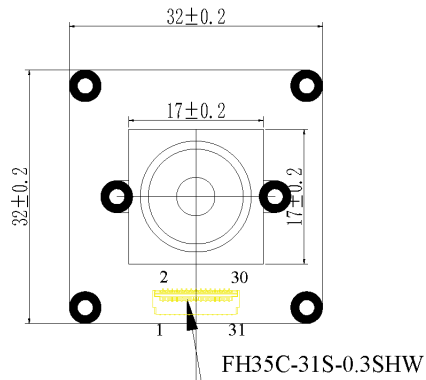
- Sensor:
 - SONY IMX415
 - Diagonal 6.43 mm (Type 1/2.8)
 - 8.29M pixel
 - Unit cell size: 1.45 μm (H) \times 1.45 μm (V)
- Output:
 - MIPI CSI-2 4-Lanes serial data output
 - RAW10 / RAW12 output
- Lens Specification:

- Interface Type: M12XP0.5
- Focal Length(EFL): $2.95 \pm 5\%$ mm
- Back Focal Length(BFL): 4.64mm
- Flange Back Length(FBL): 4.00mm
- Single lens operating temperature: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- FOV

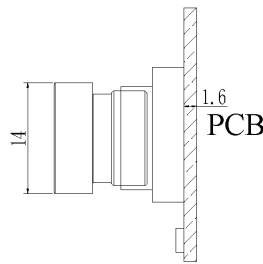
Field of view (Diagonal/Horizontal/Vertical)	CRA
D= $88.2 \pm 5^{\circ}$ H= $75 \pm 3^{\circ}$ V= $59 \pm 2^{\circ}$	15°

- Default ribbon cable length: 150 mm

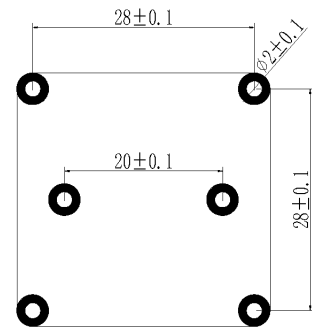
4 Physical specifications



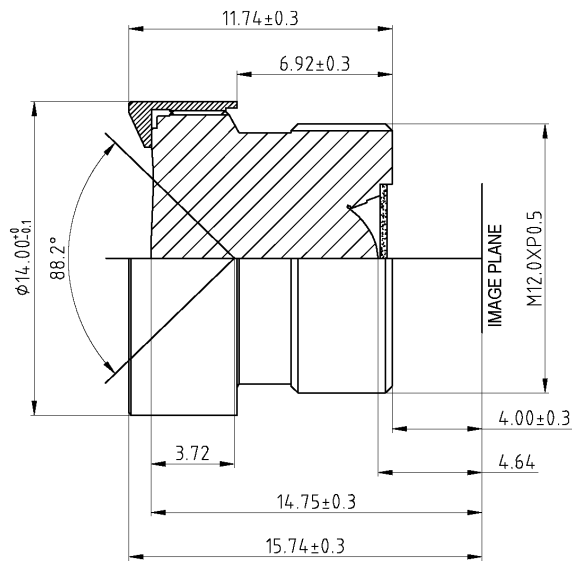
TOP VIEW



SIDE VIEW



BOTTOM VIEW



Note: all dimensions in mm

5 Pin Definition

Pin	Signal	Pin	Signal	Pin	Signal
1	DGND	12	MDP1	23	PWDN
2	MDN3	13	DGND	24	SCL
3	MDP3	14	MDN0	25	SDA
4	DGND	15	MDP0	26	NC
5	MDN2	16	DGND	27	RESET
6	MDP2	17	MCN	28	VCC3.3V
7	DGND	18	MCP	29	VCC3.3V
8	NC	19	DGND	30	VCC5V
9	NC	20	MCLK	31	VCC5V
10	DGND	21	DGND		
11	MDN1	22	NC		

6 Availability

Radxa guarantees availability of the Radxa Camera 4K until at least September 2029.

7 Support

For support, please see the support documentation section of the [Radxa Website](#) website and post questions on the [Radxa Forum](#).