



**LEOPARD**  
IMAGING

# LI-IMX415-GMSL2-140H



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## INTRODUCTION

The LI-IMX415-GMSL2-140H is equipped with Sony 8.4 MP STARVIS back-illuminated CMOS sensor IMX415 which features high sensitivity, low dark current and no smear. Its serializer is Maxim GMSL2 serializer MAX9295A/B. This camera outputs RAW image data.

## SPECIFICATIONS

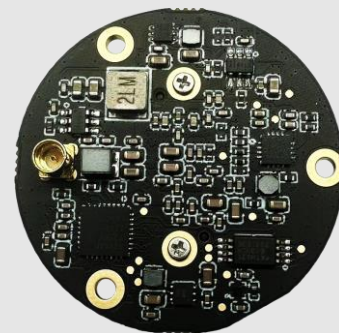
Sensor	Sony 1/2.8" 8.4MP STARVIS back-illuminated CMOS sensor IMX415
Optical Format	1/2.8"
Resolution	3864 (H) x 2176 (V) (active pixels)
Pixel Size	1.45 x 1.45 $\mu\text{m}$
Output Format	12-bit / 10-bit RAW
Color / Mono	Color sensor
Maximum Frame Rate	12 bit: 60 fps @ all-pixel scan mode 10 bit: 90 fps @ all-pixel scan mode
HDR (High Dynamic Range)	Supported
Serializer	Maxim MAX9295A/B
Power Supply Range	12 ~ 18 VDC
Connector	MMCX
Power Consumption	109 mA @ 12 VDC (3864 x 2192 @ 18 fps)
Operating Temp	-35°C ~ +80°C
Storage Temp	-35°C ~ +80°C
Weight	~ 25 g
Part#	LI-IMX415-GMSL2-140H

## APPLICATIONS

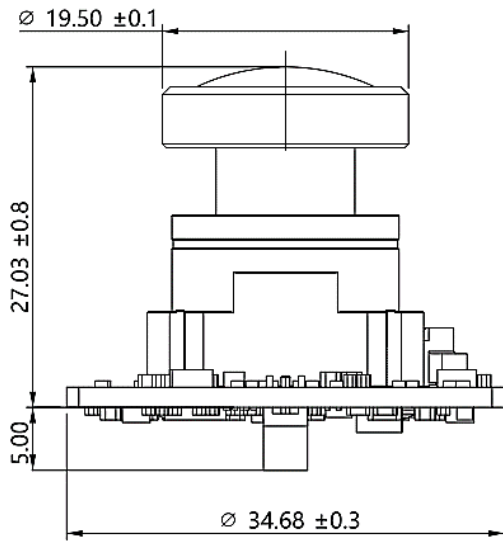
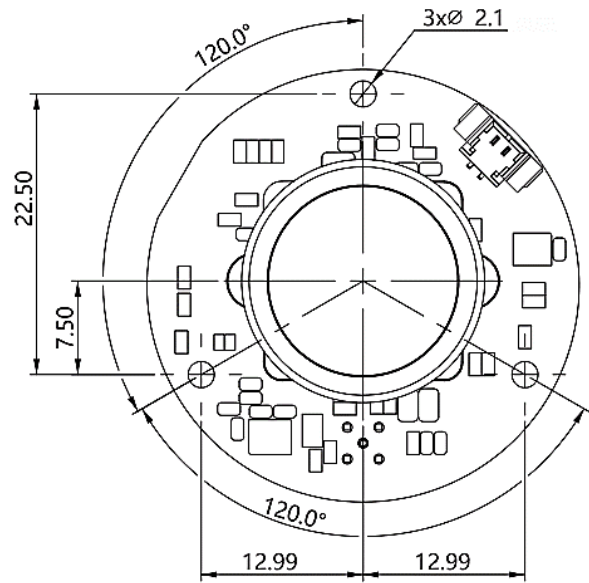
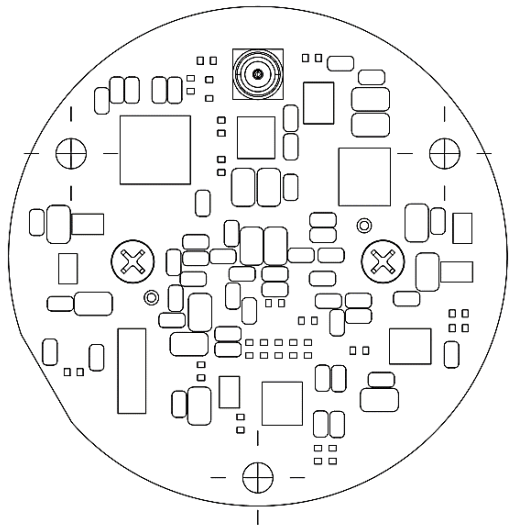
- ◆ Surveillance Camera
- ◆ FA Camera
- ◆ Industrial Camera

## LENS SPECIFICATIONS

Effective Focal Length	2.3 mm
Aperture, F/#	2.3
Field of View (FOV)	142.2° horizontal
	76.6° vertical
	169° diagonal
Optical Distortion	< -9.0%
Relative Illumination	> 40%
IR Cut Filter	650 nm IR cut filter
Lens Mount	Active Alignment (AA)



# DIMENSIONS

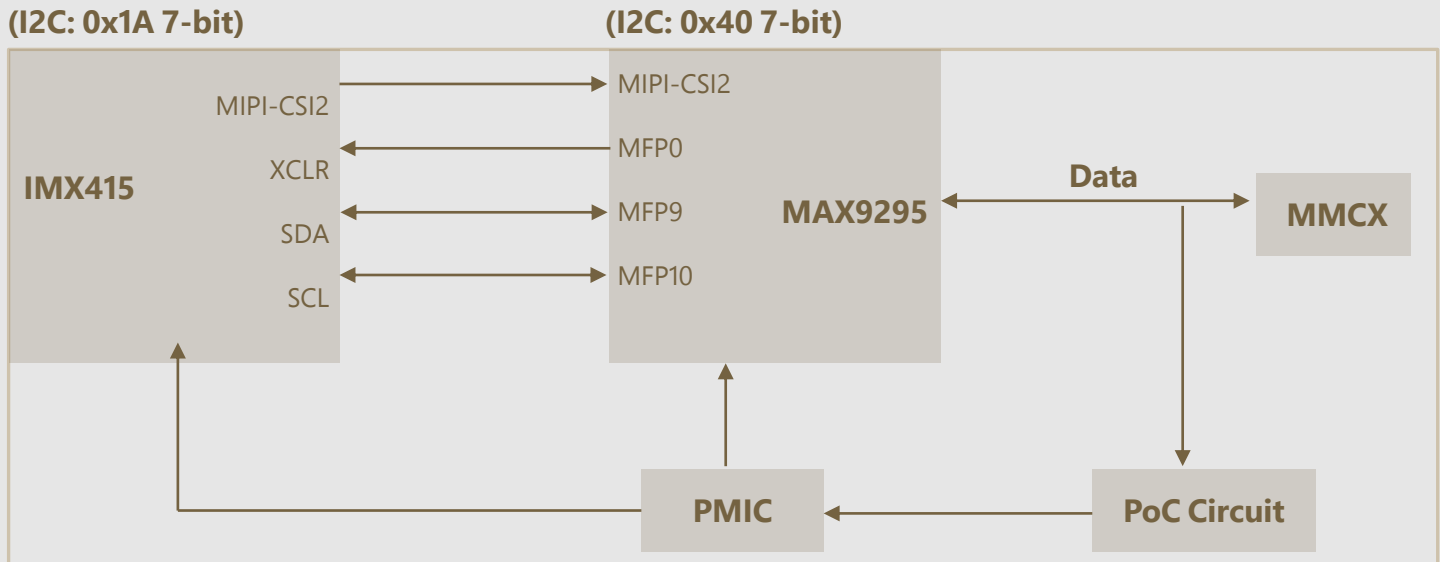


TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

**NOTE:**

- ⊗ marked are important sizes.
- All materials are compliant with RoHS requirements.
- Tolerances for the unmarked – refer to the Tolerance table.
- Unit: mm

## SYSTEM BLOCK DIAGRAM



## PROGRAMMABLE 5V OUTPUT HEADER DETAILS

Parameter	Description	Diagram
Number of Contacts	2	
Part Number	0533980271	

## PINOUT DETAILS

Pin No.	Signal Name	Pin Type	Description
1	5V0	OUTPUT	5V0 Power supply (Default <b>Off</b> . Power on by pulling up <b>MFP6</b> )
2	GND	GND	GND

- REVISION HISTORY

Revision	Description	Release Date
1.0	First Release	1 Mar 2024

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