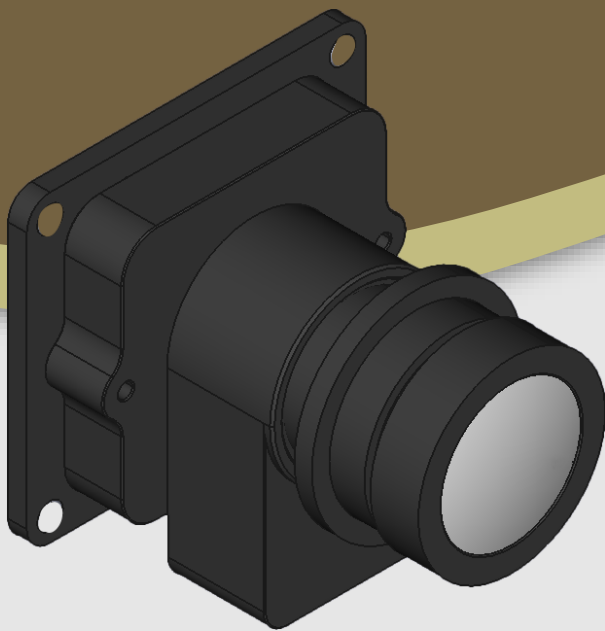




**LEOPARD**  
IMAGING

# LI-IMX678-MIPI-HL-118H



**Address:**

910 Auburn Ct  
Fremont, CA 94538  
USA



**Phone:**

+1 (408)263-0988

**Fax:**

+1 (408)217-1960



**Sales:**

[sales@leopardimaging.com](mailto:sales@leopardimaging.com)

**Support:**

[support@leopardimaging.com](mailto:support@leopardimaging.com)

## INTRODUCTION

The LI-IMX678-MIPI-HL-118H is a MIPI CSI-2 camera with Sony diagonal 8.86 mm (Type 1/1.8) STARVIS2 CMOS color sensor IMX678 which has low power consumption and achieves high sensitivity, low dark current and no smear. This camera outputs RAW data.

## SPECIFICATIONS

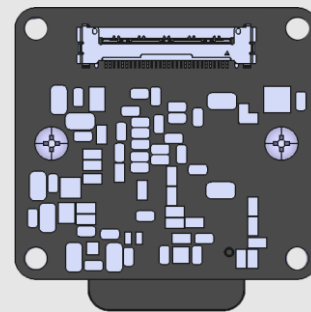
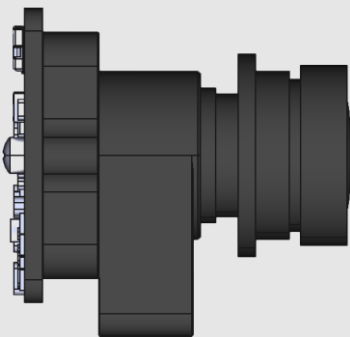
Sensor	Sony Diagonal 8.86 mm STARVIS2 CMOS Sensor IMX678
Optical Format	1/1.8"
Resolution	3856 (H) x 2176 (V) (active pixels)
Pixel Size	2.0 x 2.0 $\mu\text{m}$
Output Format	10-bit / 12-bit RAW data
Maximum Frame Rate	60 fps @ all-pixel scan mode
HDR (High Dynamic Range)	Supported
ISP	Not included
Color / Mono	Color sensor
Interface	4-lane MIPI CSI-2
Power Consumption	TBD
Operating Temp	-30°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	TBD
Part#	LI-IMX678-MIPI-HL-118H

## APPLICATIONS

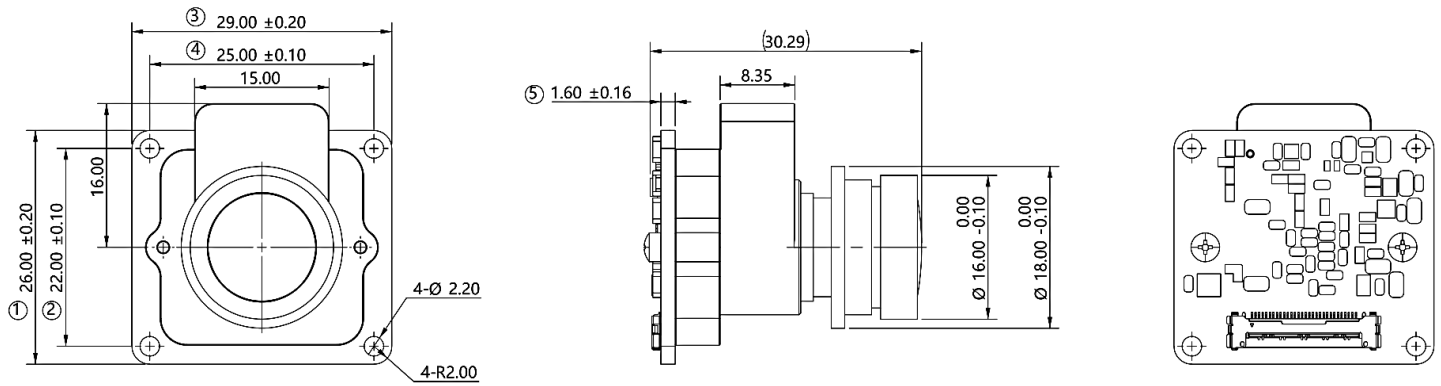
- IoT
- Drone
- Robots

## LENS SPECIFICATIONS

Effective Focal Length	4.063 mm
Aperture, F/#	2.29 $\pm$ 5%
Field of View (FOV)	118° horizontal
Optical Distortion	-28.1%
TV Distortion	-9.3%
Relative Illumination	59.1%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x 0.5



# DIMENSIONS



1/4\"-20UNC-2B  
thread depth 6.0 mm

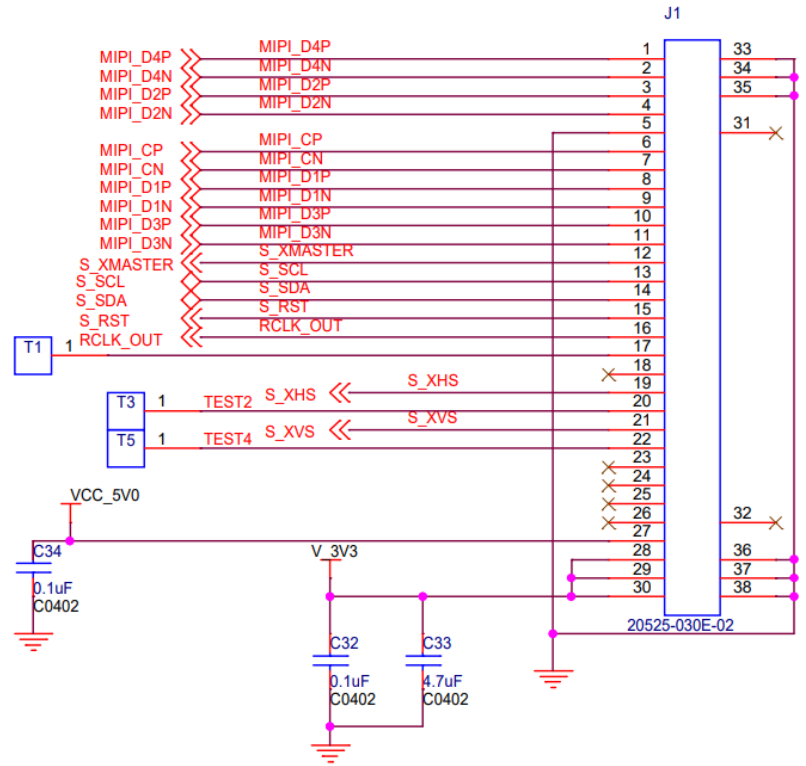
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X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

## NOTE:

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

# INTERFACE J1

- Connector Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX cable: LI-FAW-1233
- Sensor I2C Address: 0x1A (7-bit)
- External Power Supply: 3.3V, 5.0V
- 3.3V (analog), 1.8V and 1.1V are generated from board



## ● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	31 Jan 2024

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Email: [sales@leopardimaging.com](mailto:sales@leopardimaging.com)

Website: [www.leopardimaging.com](http://www.leopardimaging.com)

