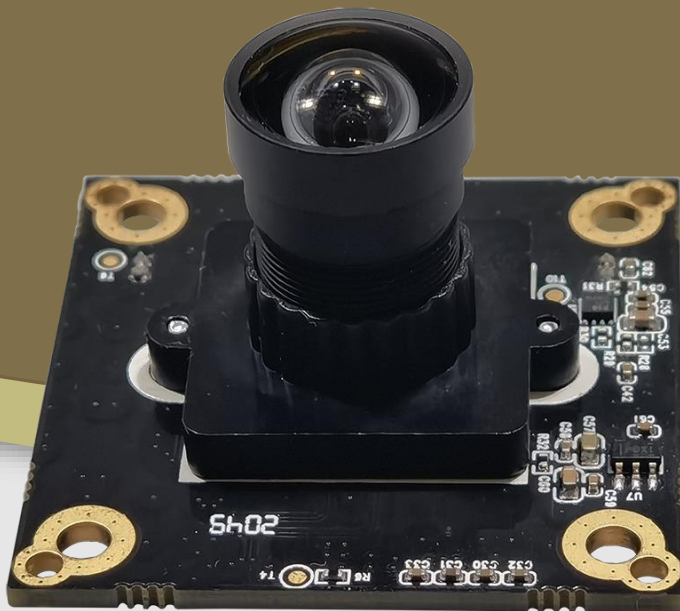




**LEOPARD**  
IMAGING

# LI-IMX477-MIPI-M12



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## INTRODUCTION

The LI-IMX477-MIPI-M12 is a MIPI CSI-2 camera equipped with Sony diagonal 7.857 mm (Type 1/2.3) 12.3MP CMOS image sensor IMX477 which could achieve high speed image capturing, high sensitivity and low noise image. This camera outputs 8-bit / 10-bit / 12-bit RAW data.

## SPECIFICATIONS

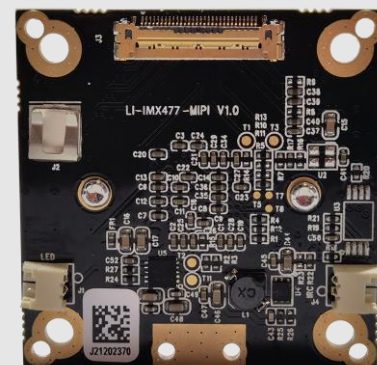
Sensor	Diagonal 7.857 mm (Type 1/2.3) 12.3MP CMOS Image Sensor IMX477
Optical Format	1/2.3"
Resolution	4056 (H) x 3040 (V) (active pixels)
Pixel Size	1.55 x 1.55 $\mu\text{m}$
Output Format	8-bit / 10-bit / 12-bit RAW data
Maximum Frame Rate	60 fps @ 4056 x 3040
ISP	Not included
Color / Mono	Color sensor
Interface	4-lane MIPI CSI-2
Power Consumption	199 mA @ 5 VDC (4056 x 3040 @ 12 fps)
Operating Temp	-20°C ~ +75°C
Storage Temp	-20°C ~ +75°C
Weight	~ 14 g
Part#	LI-IMX477-MIPI-M12

## APPLICATIONS

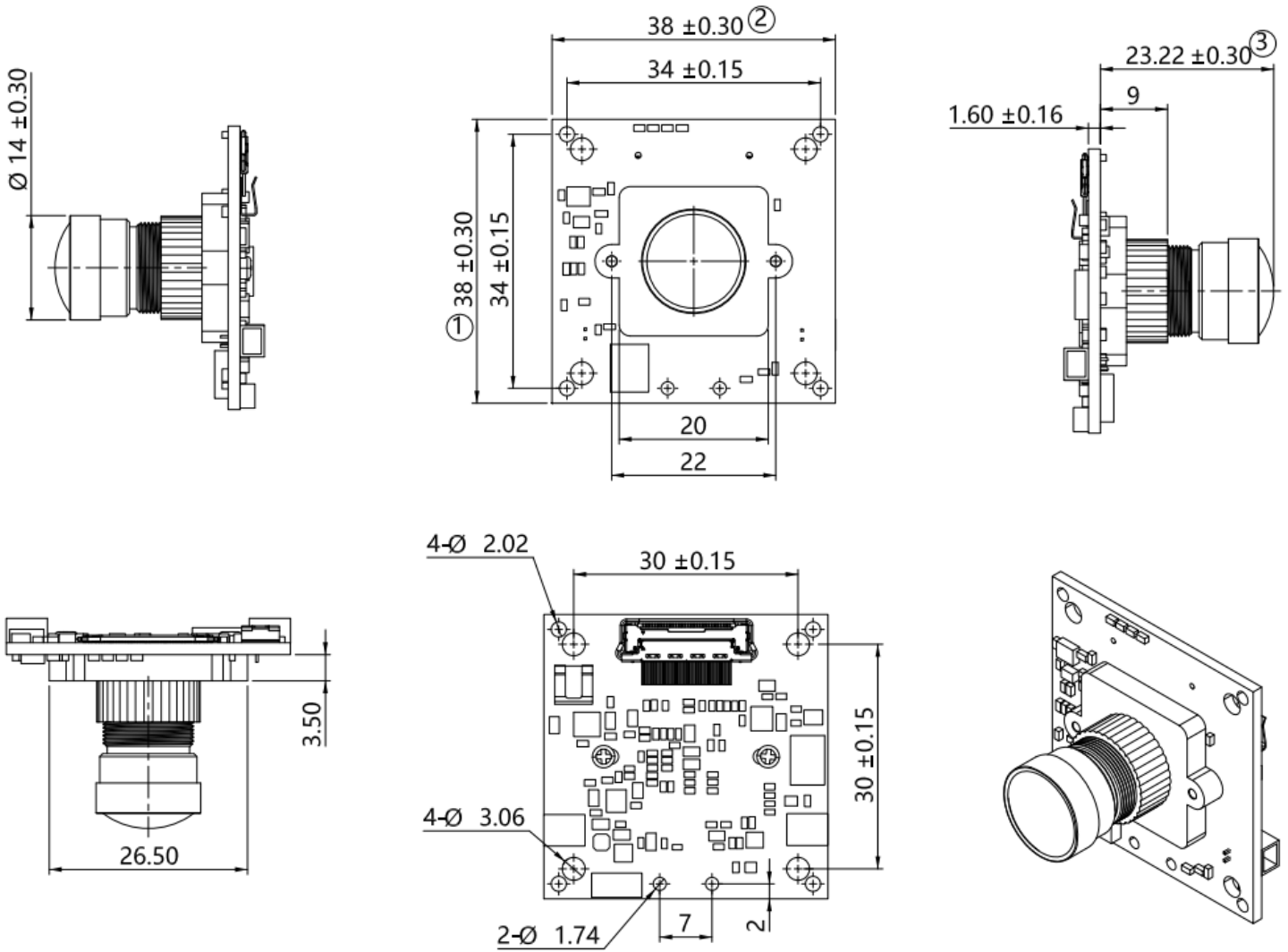
- IoT
- Drone
- Robots

## LENS SPECIFICATIONS

Effective Focal Length	3.25 mm $\pm$ 5%
Aperture, F/#	2.60 $\pm$ 5%
Field of View (FOV)	101.6° diagonal
	88.5° horizontal
	71.6° vertical
TV Distortion	< -0.6%
Relative Illumination	> 58.98%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5



# DIMENSIONS



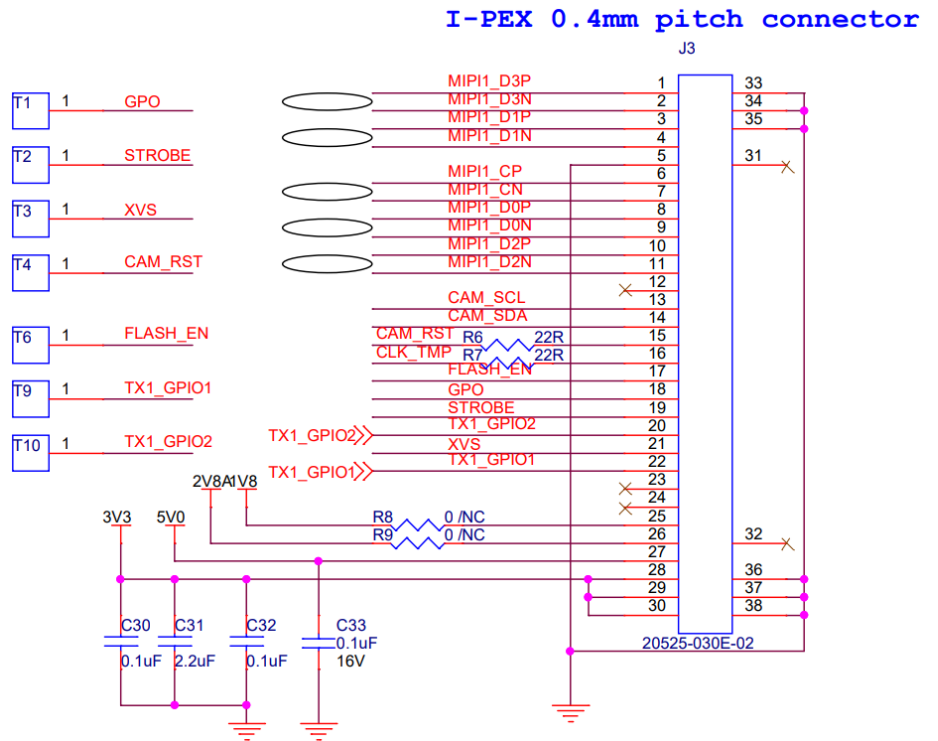
**NOTE:**

- $\otimes$  marked are important sizes.
- Tolerances for the unmarked are  $\pm 0.3$  mm.

Unit: mm

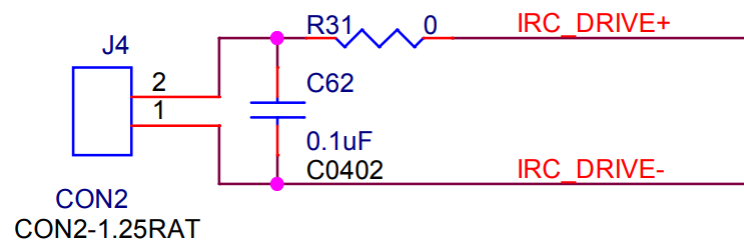
## INTERFACE J3

- Connector Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233
- Sensor I2C Address: 0x10 (7-bit)
- Sensor input clock needs to be supplied from pin 16.
- External Power Supply: 3.3V, 5.0V
- 2.8V, 1.8V, 1.05V are generated from board.
- 5.0V is not used since it's for IR cut switch function only.



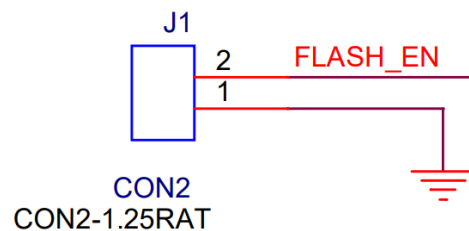
## INTERFACE J4

- Connector Part#: 1734829-2
- Number of Positions: 2
- Pitch: 1.25 mm



## INTERFACE J1

- Connector Part#: 1734829-2
- Number of Positions: 2
- Pitch: 1.25 mm



## ● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	24 Dec 2020
1.1	1. Replaced SYD1201A lens with JSD2733-A1. 2. Updated 2D dimensions, power consumption and the description for interface J3.	08 Dec 2021
1.2	Deleted info quoted from sensor spec.	26 May 2022
1.3	Updated 2D dimensions and product images.	19 Aug 2022

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