



**LEOPARD**  
IMAGING

# LI-VENUS-ISX031-GMSL2-030H



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## INTRODUCTION

The LI-VENUS-ISX031-GMSL2-030H is equipped with Sony Diagonal 7.45 mm (Type 1/2.42) CMOS image sensor ISX031 and Maxim GMSL2 serializer MAX9295A/B. This camera outputs YUV 8-bit data.

## SPECIFICATIONS

Sensor	Sony Diagonal 7.45 mm CMOS Image Sensor ISX031
Optical Format	1/2.42"
Resolution	1937 (H) x 1553 (V) (active pixels)
Pixel Size	3.0 x 3.0 $\mu\text{m}$
Output Format	YUV 8-bit
Color / Mono	Color sensor
Frame Rate	30 fps @ 1920 x 1536 (based on ISP)
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Serializer	Maxim MAX9295A/B
Power Supply Range	8 ~ 17 VDC
Connector	FAKRA Z TYPE
IP Rating	IP67
Power Consumption	97 mA @ 12 VDC (1920 x 1536 @ 30 fps)
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	~ 39 g
Part#	LI-VENUS-ISX031-GMSL2-030H

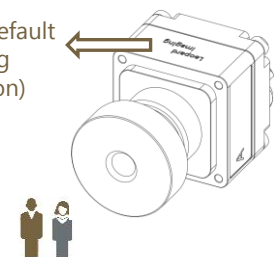
## APPLICATIONS

- Automotive
  - ◆ Autonomous Driving
  - ◆ Assisted Driving
  - ◆ Digital Video Recording
  - ◆ Machine Vision

## DEFAULT IMAGING DIRECTION

- The logo "Leopard Imaging" is on the TOP.

TOP (Default Imaging Direction)

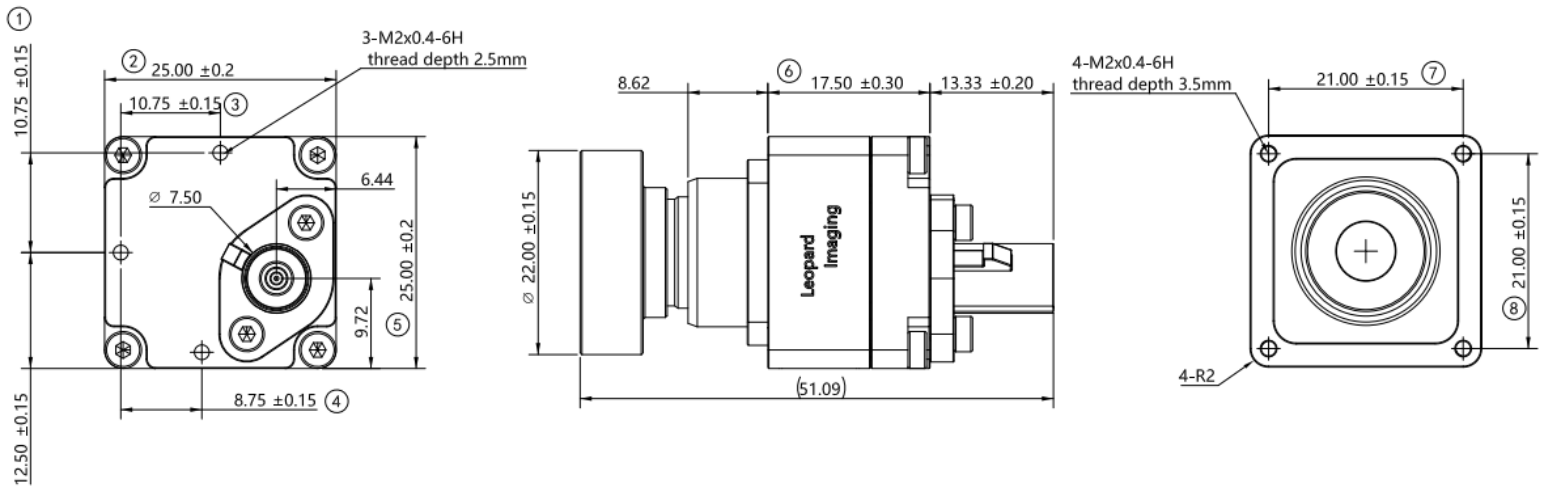


## LENS SPECIFICATIONS

Focal Length	11.9 mm
Aperture, F/#	2.0
Field of View (FOV)	30° horizontal
Distortion	-4.8% rectilinear at 8.0 mm image circle
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5



## DIMENSIONS



### NOTE:

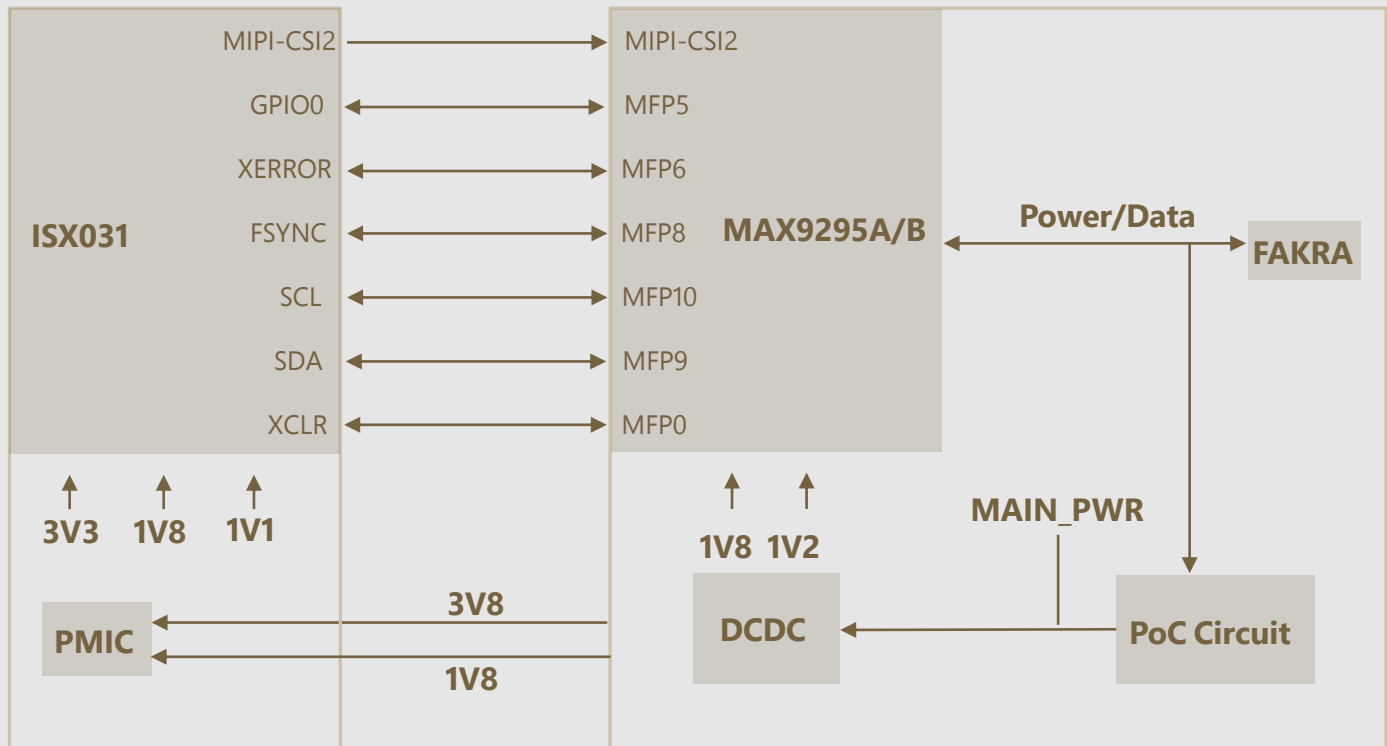
- ⊗ marked are important sizes.
- Tolerances for others unmarked are  $\pm 0.3$  mm.

Unit: mm

## PINOUT CONNECTIONS

(I2C: 0x34 8-bit)

(I2C: 0xC4 8-bit)



## USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



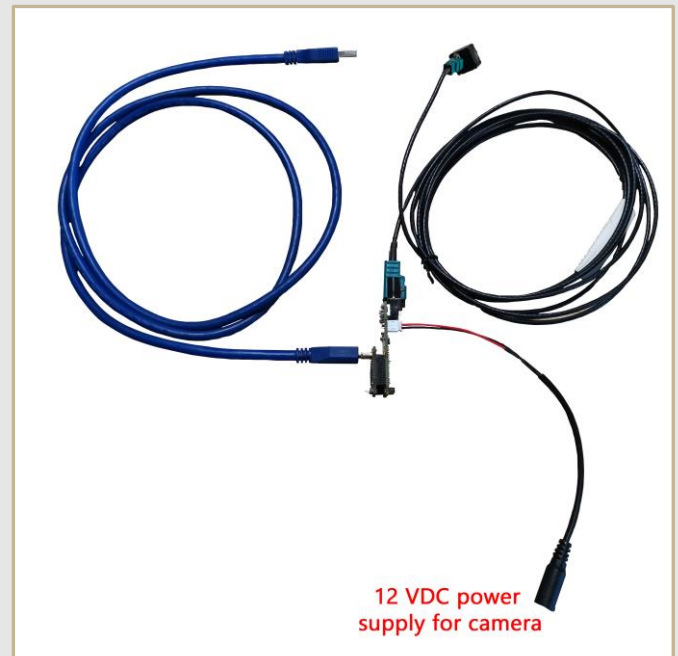
Bottom View

LI-VENUS-ISX031-GMSL2-030H can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-VENUS-ISX031-GMSL2-030H**

### SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Allows customization
- 12 VDC power supply for camera
- Weight: ~ 194 g
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1920 x 1536 @ 30 fps
- Power consumption: 97 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers



### BOM

#	Items	QTY
1	LI-VENUS-ISX031-GMSL2-030H	1
2	LI-GMSL2-USB	1
3	3-Meter Fakra Cable	1
4	12 VDC Power Supply	1
5	USB3.0 Cable	1

### SDK SUPPORTED

- Camera Tool Source Code in C#
- Capture & Display
- Register Access Function

## ● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	12 Dec 2022
1.1	Updated 2D dimensions.	16 Dec 2022
1.2	Updated "Pinout Connections" section.	20 Oct 2023

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