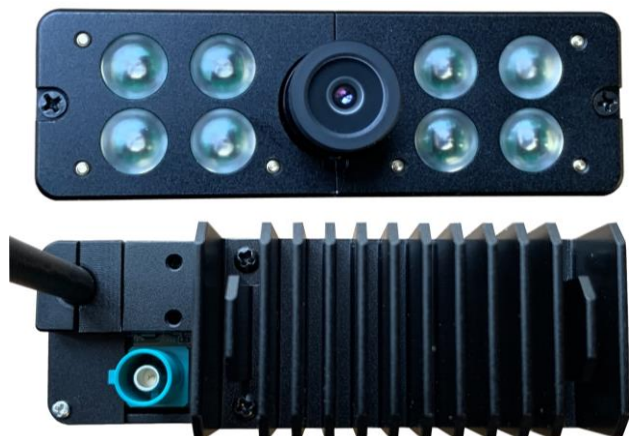




# LI-AR0234YUV-GMSL2-QC Data Sheet

## Key Features

- ON SEMI 2.3 MP AR0234 Sensor
- Optical format: 1/2.6"
- Maximum resolution: 1920 (H) x 1200 (V)
- Pixel size: 3.0 x 3.0  $\mu\text{m}$
- 12-bit RAW output without compression
- Monochrome sensor
- Global shutter
- Lens: FOV H 92°
- Includes 930 nm ~ 960 nm band pass filter
- Includes eight 940 nm IR LEDs
- GMSL2 Serializer
- Connector: FAKRA Z TYPE
- Operation Temp:  
-40°C ~ +105°C (ambient)  
-40°C ~ +125°C (junction)
- Weight: 128.6g +/- 0.5g
- Part#: **LI-AR0234YUV-GMSL2-QC**



## Application

- In Cabin Automotive
  - Gesture Recognition
  - Iris Scanning
  - HeadRoll
  - Eye Tracking
  - Augmented Reality

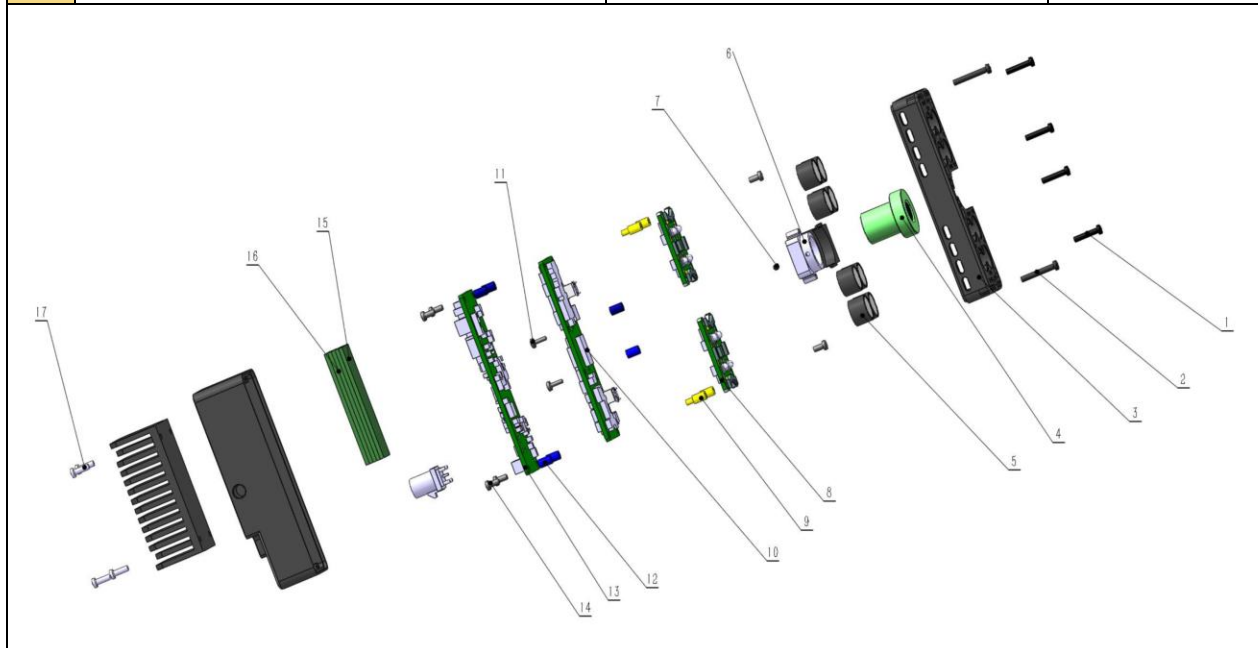
## Lens Spec

- Focal length: 3.6 mm
- Aperture, F/#: 2.0
- Built in 940 nm IR filter
- FOV (H): 92°
- Distortion: -45%
- Mount: M12 x 0.5

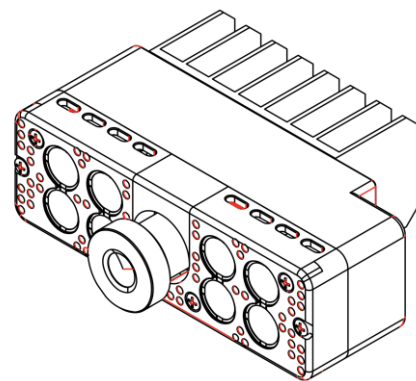
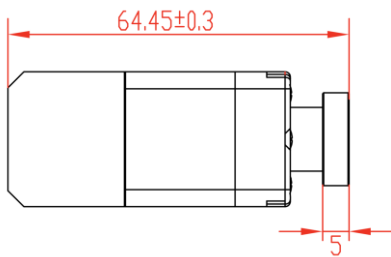
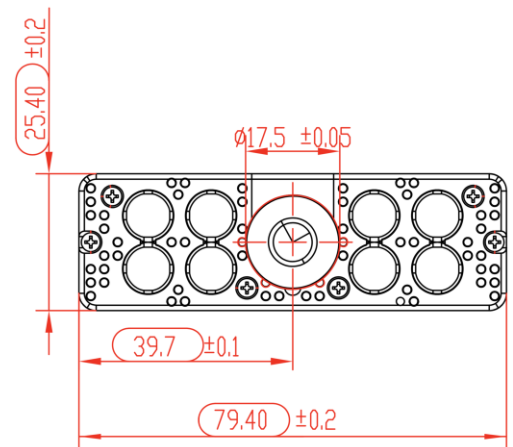
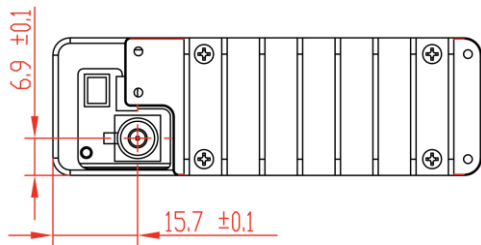
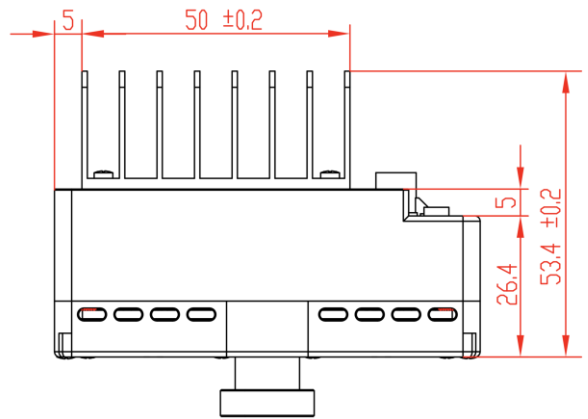
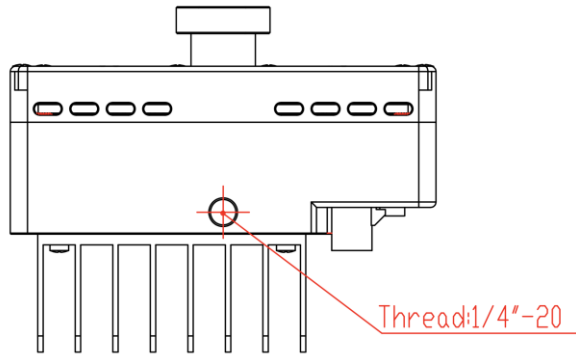


# BOM

#	Material Number	Description	QTY/SET
1	10.02.S020080SA4DP	M2 x 10 screw	4
2	10.02.C020140PA4ZL	M2 x 14 screw	2
3	10.09.34QC90-00	Enclosure	1
4	08.01.HK-8205-H1-M12-PT-4	Lens	1
5	C12491_SIRI-DIFF	Diffuser	8
6	08.04.LI-M12-155-T-00	Lens holder	1
7	10.04.C020020HABD	M2 x 2 set screw for lens	1
8	LI-IRLED-950 V1.0	LED board	2
9	10.05.U020030GCPX	M2 x 5 + 3 standoff	4
10	LI-AR0234-MIPI-QC V1.0	Sensor board	1
11	10.02.C014050PR4NL	M1.4 x 5 screw, silver	2
12	10.05.U020050GCNX	M2 x 5 standoff	6
13	LI-GMSL2-CSLINK-QC V1.0	GMSL2 board	1
14	10.02.C020040PA4ZL	M2 x 4 screw	10
15	10.10.HSP8040015	Thermal pad	1



# Dimensions



## Cable Connector

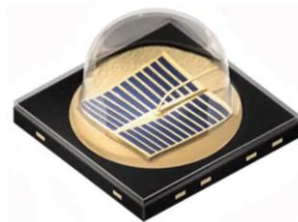
- Housing Connector- FAKRA Z Type
- Cable length: 3 meters  
Supports single Coax Cable transmit up to 12 meters
- Cable Part#: FAK-SMZSMZ-3M
- FAKRA type connectors



## IR LED

- Part#: SFH 4725S
- Wavelength: 940 nm
- Viewing Angle: 90°
- Operating Temperature: -40°C ~ +125°C (TA)
- Power supply: 12 VDC
- QTY on camera: 8

**NOTE: Do not place this demo module within 0.2 meter from human eye to avoid the hazard by IR LED.**



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

## LI-GMSL2-USB-BOX



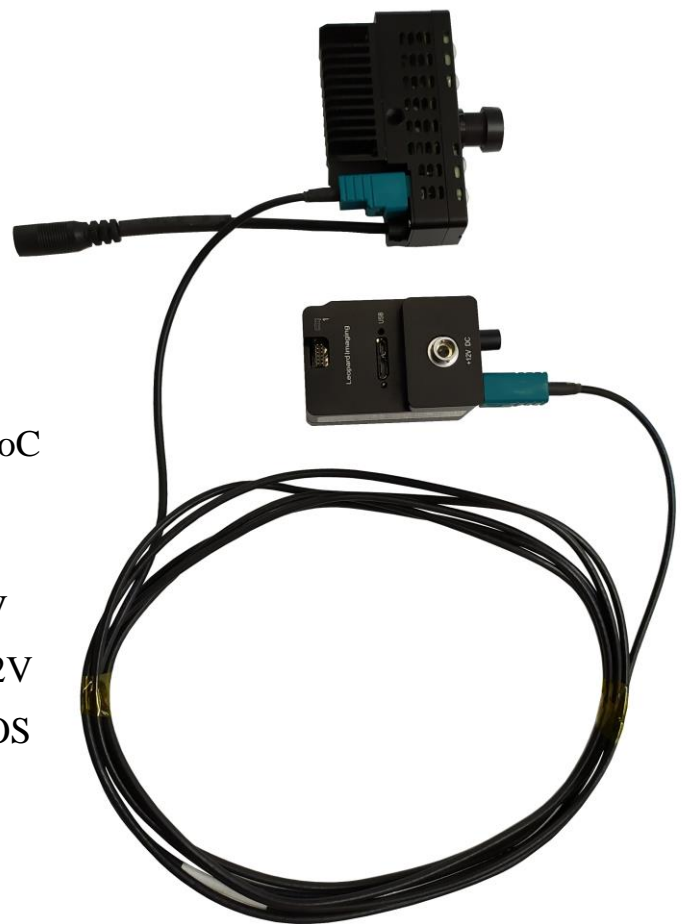
LI-AR0234YUV-GMSL2-QC can connect to LI-GMSL2-USB-BOX as a USB 3.0 camera.  
Part#: [LI-USB30-AR0234YUV-GMSL2-QC](#)

### Key Features

- USB 3.0 Super Speed support
- 12-bit RAW output without compression
- UVC compliant
- 12 VDC Power Supply for Camera
- 12 VDC Power Supply for LEDs
- Weight: 256g +/- 3 g
- Single Coax Cable transmits up to 12 meter PoC (Power over Cable)
- Supports 1920 x 1200 @ 30 fps
- Power consumption (LED): < 350 mA @ 12V
- Power consumption (Camera): < 85 mA @ 12V
- Compatible with Windows, Linux and other OS which have UVC drivers

### SDK Supported

- Camera Tool Source Code in C#
- Capture & Display
- RAW to Grayscale conversion



## Revision History

Revision	Description	Release Date
1.0	First Release.	15. Aug. 2019
1.1	Updated the LED diffuser and housing.	19. Dec. 2019
1.2	Added enclosure to LI-USB30-DESER-GMSL2.	30. Mar. 2020
1.3	Changed LED QTY from 4 to 8 and wavelength from 950 nm to 940 nm on the first page.	15. Dec. 2022
1.4	Deleted lens model info.	09. Aug. 2023

