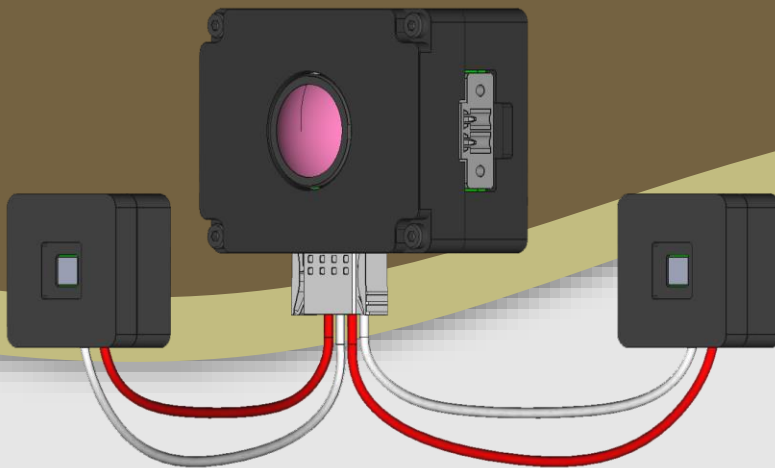




LI-OV2311-VCSEL-OMS-GMSL2-173H



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INTRODUCTION

The LI-OV2311-VCSEL-OMS-GMSL2-173H is equipped with OmniVision 2 MP CMOS image sensor OV2311 which uses OmniPixel3-GS™ technology, Serializer Maxim MAX9295A and VCSEL. This camera outputs 1600 x 1300 RAW image data.

SPECIFICATIONS

| | |
|--|--|
| Sensor | OmniVision CMOS Image Sensor OV2311 |
| Optical Format | 1/2.9" |
| Resolution | 1600 (H) x 1300 (V) |
| Pixel Size | 3.0 x 3.0 μm |
| Output Format | 10-bit RAW data |
| Color / Mono | Monochrome |
| Max Frame Rate | 60 fps @ 1600 x 1300 |
| Shutter | Global shutter |
| Serializer | Maxim MAX9295A |
| Power Supply Range | 9 ~ 19 V |
| ISP | Not included |
| VCSEL | Included |
| VCSEL Power Connector | 0395061002 |
| FAKRA Connector | FAKRA Z TYPE |
| Power Consumption (1600 x 1300 @ 30 fps) | 60 mA @ 12 VDC (Sensor) 250 mA @ 12 VDC (VCSEL) |
| Operating Temp | -40°C ~ +85°C |
| Storage Temp | -40°C ~ +85°C |
| Weight | ~ 95 g |
| Part# | LI-OV2311-VCSEL-OMS-GMSL2-173H |

APPLICATIONS

In Cabin Automotive

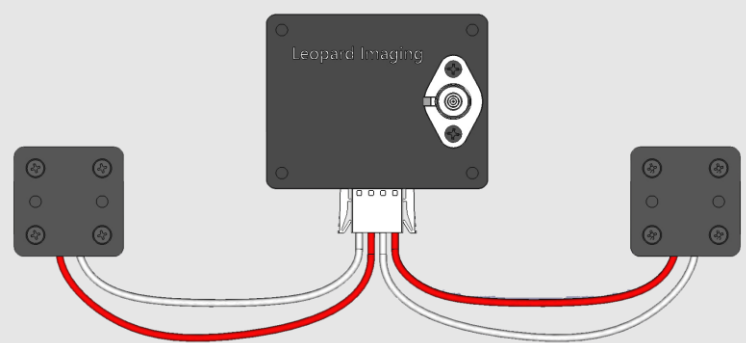
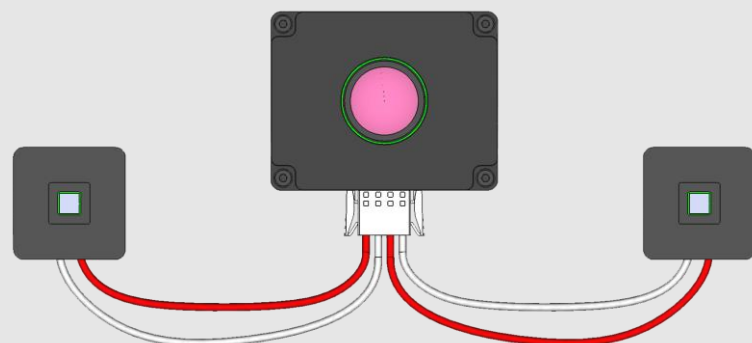
- ◆ Gesture Recognition
- ◆ Eye Tracking
- ◆ Iris Scanning
- ◆ Augmented Reality
- ◆ Head Roll
- ◆ Machine Vision

LENS SPECIFICATIONS

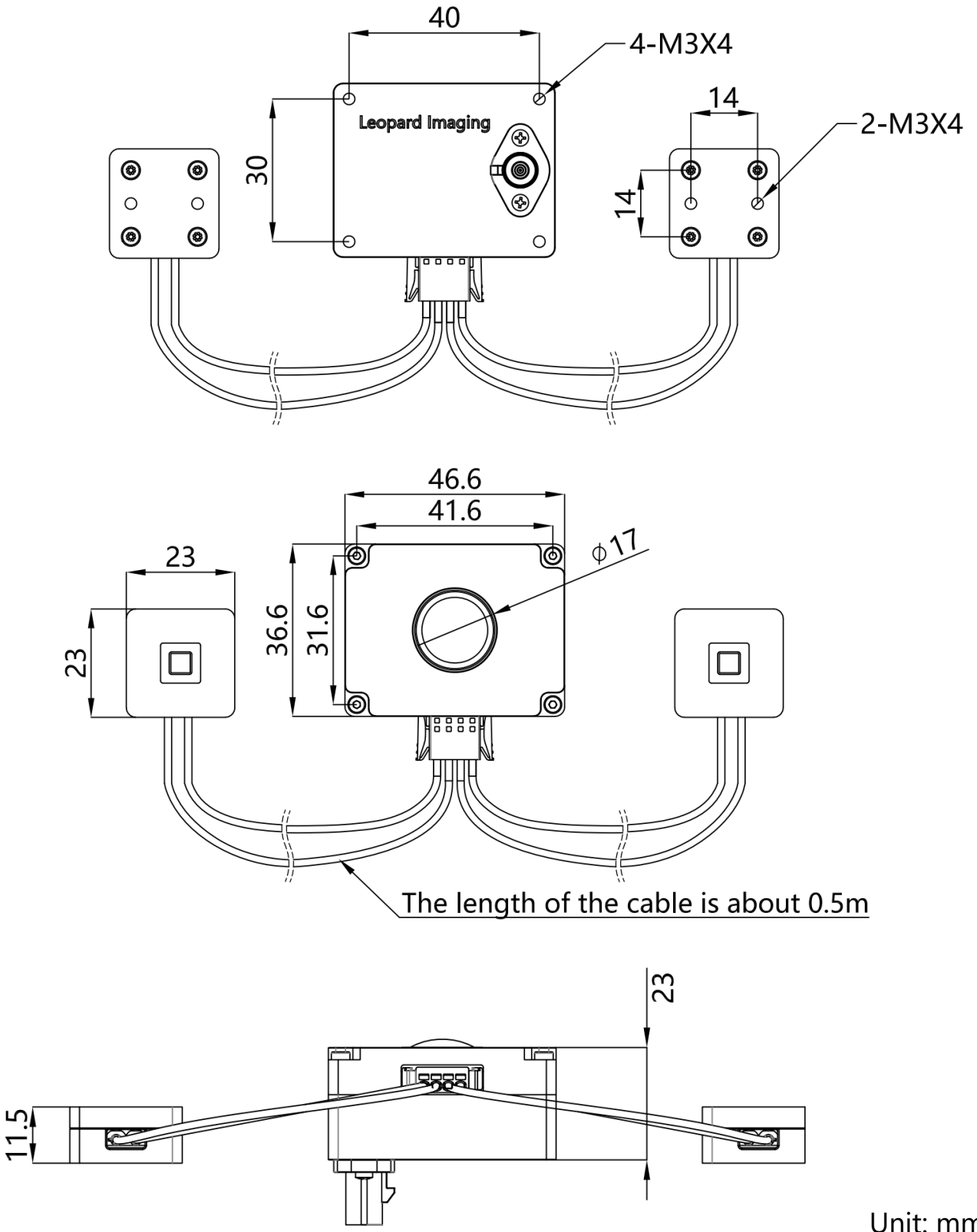
| | |
|---------------------|------------------|
| Focal Length | 1.4 mm |
| Aperture, F/# | 2.2 |
| Field of View (FOV) | 173° horizontal |
| IR Filter | 940 nm IR filter |
| Lens Mount | M12 x P0.5 |

VCSEL SPECIFICATIONS

| | |
|-----------------------------|-------------------|
| Wavelength | 940 nm |
| Field of Illumination (FOI) | 125.5° horizontal |
| | 111.5° vertical |
| Power Supply | 12 VDC |
| QTY on Camera | 2 |

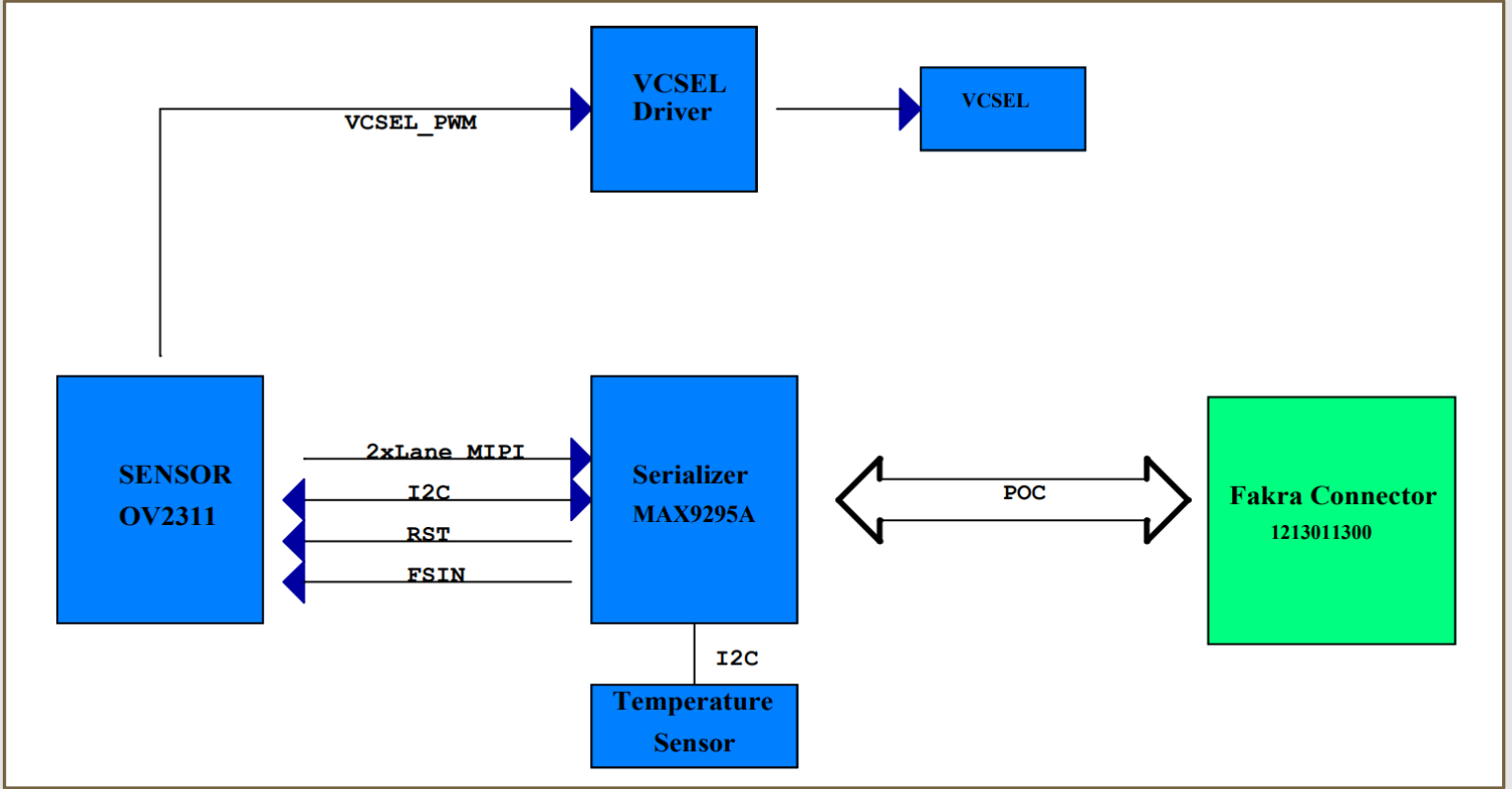


DIMENSIONS

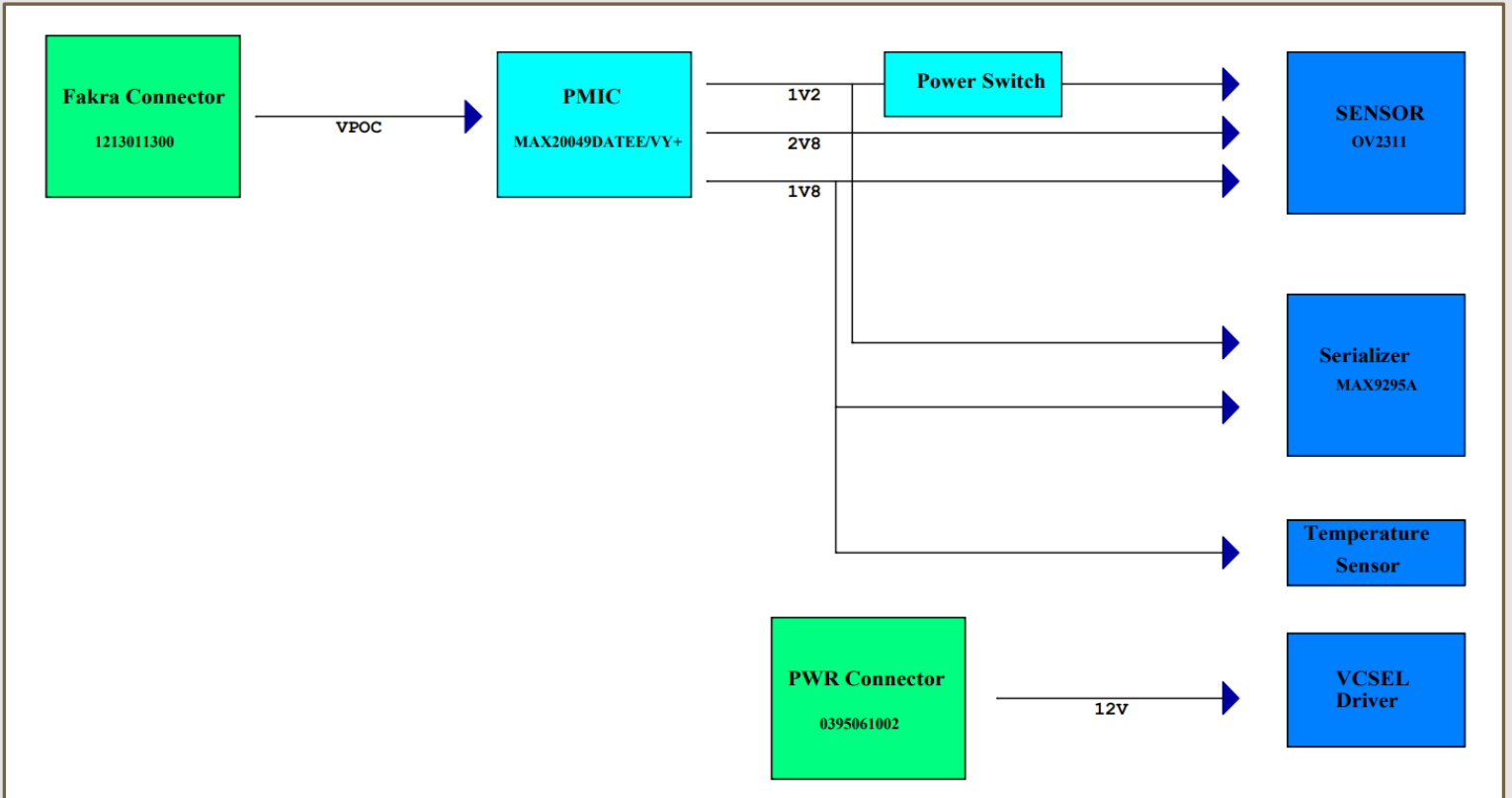


Unit: mm

SYSTEM BLOCK DIAGRAM

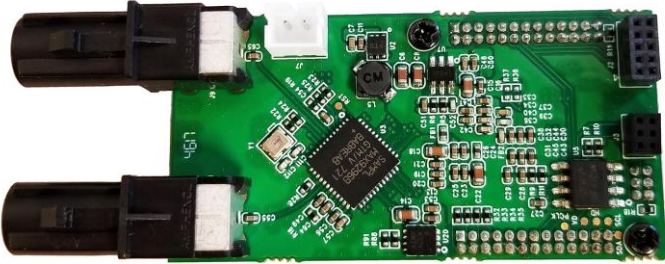


POWER BLOCK DIAGRAM

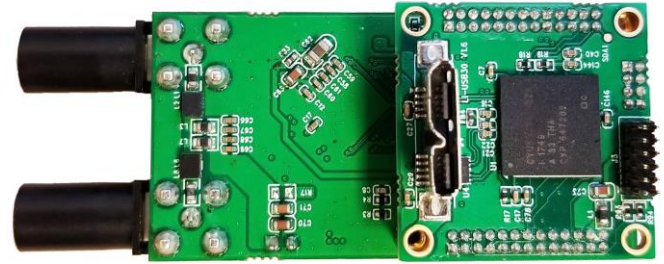


USB3.0 CAMERA KIT

LI-USB30-DESER-GMSL2



Top View



Bottom View

LI-OV2311-VCSEL-OMS-GMSL2-173H can connect to LI-USB30-DESER-GMSL2 as a USB 3.0 camera.

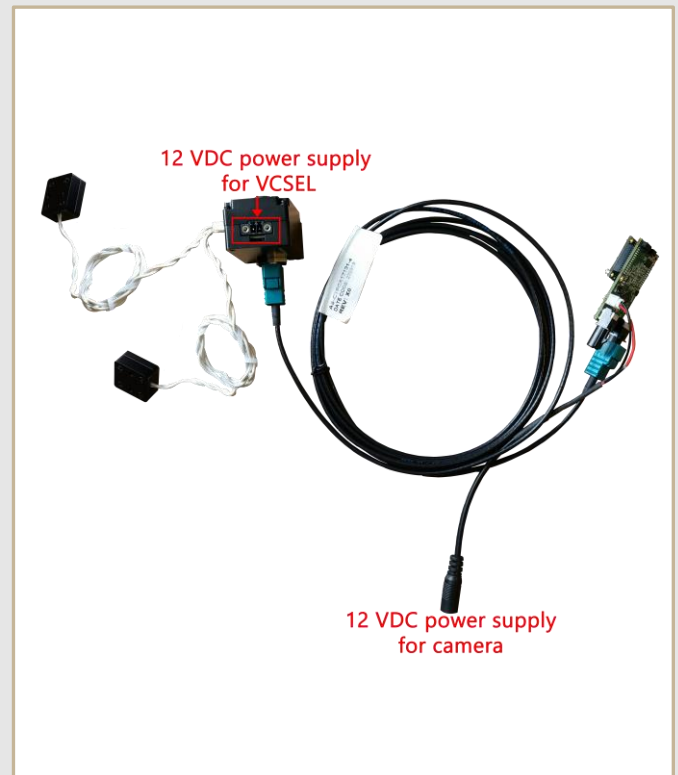
Part#: **LI-USB30-OV2311-VCSEL-OMS-GMSL2-173H**

SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliance
- Global shutter
- Provide customization services
- 12 VDC power supply for camera
- 12 VDC power supply for VCSEL
- Weight: ~ 386 g
- Single Coax Cable transmit up to 12 meters PoC (Power over Cable)
- Resolution: 1600 x 1300 @ 30 fps
- Support Windows, Linux OS and other OS which include the UVC drivers

BOM

| # | Items | QTY |
|---|--------------------------------|-----|
| 1 | LI-OV2311-VCSEL-OMS-GMSL2-173H | 1 |
| 2 | LI-USB30-DESER-GMSL2 | 1 |
| 3 | 3-meter Fakra Cable | 1 |
| 4 | 12V DC Power Supply for Camera | 1 |
| 5 | 12V DC Power Supply for VCSEL | 1 |
| 6 | 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. | 09 June 2021 |

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