



LEOPARD IMAGING INC

# LI-TX2B-IMX185-GMSL2-X

## Data Sheet

### Key Features

- Nvidia Jetson TX2 SOM included
- Support up to six GMSL2 cameras
- Sony Diagonal 8.58mm Type 1/1.9 CMOS Image Sensor IMX185LQJ
- Lens: FOV H 50
- 2 x 1920 x 1080 resolution
- GMSL2 serializer and De-serializer included
- Connector: FAKRA Z TYPE
- Length of Fakra cable: 3 meters
- Multiple length Fakra cables supported
- M12 lens
- Camera size: 30mm x 30mm
- TX2 driver binary and source code included
- Part#:  
(2cam) **LI-TX2B-IMX185-GMSL2-D**  
(4cam) **LI-TX2B-IMX185-GMSL2-Q**  
(6cam) **LI-TX2B-IMX185-GMSL2-H**

### BOM

| # | Items             | QTY       |
|---|-------------------|-----------|
| 1 | LI-TX2-BOX1-GMSL2 | 1         |
| 2 | FAK-SMZSMZ 3M     | 2, 4 or 6 |
| 3 | LI-IMX185-GMSL2   | 2, 4 or 6 |
| 4 | LI-PS12-02        | 1         |



### Application

- IoT camera
- Machine vision
- Video analytics

### Lens Spec

- Model: DSL944
- Focal length: 7.5 mm
- Aperture, F/#: 2.8
- Built in 650nm IR cut filter
- FOV (D/H/V): 56 °/ 49 °/ 29 °
- Distortion: < 2%
- Mount: M12 x 0.5



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# LI-TX2-BOX1-GMSL2

## Technical details

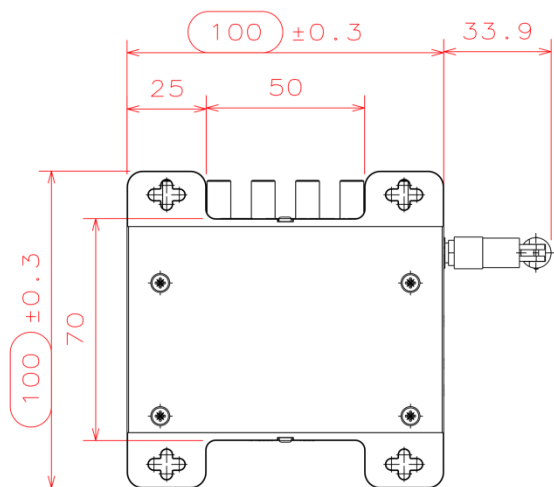
- Nvidia Jetson TX2 SOM Included
- 6 GMSL2 interfaces
- 1 Micro SD card interface
- 1 Micro HDMI connector
- 1 Power socket (DC 12V)
- 1 RJ45 Ethernet connector
- 1 USB 2.0 micro B interface
- REC, RST and PWR buttons included
- Heat sink and fan included
- WIFI Antenna included
- Connector: FAKRA Z TYPE
- Includes 4 mounting holes
- Weight: 500g
- Size: 100mm x 100mm x 69mm
- Part#: **LI-TX2-BOX1-GMSL2**



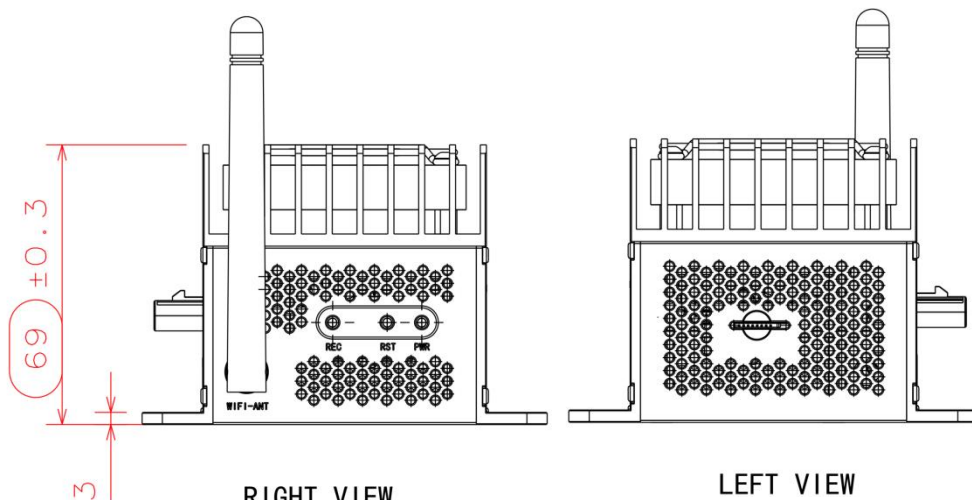
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## Dimensions (with box)

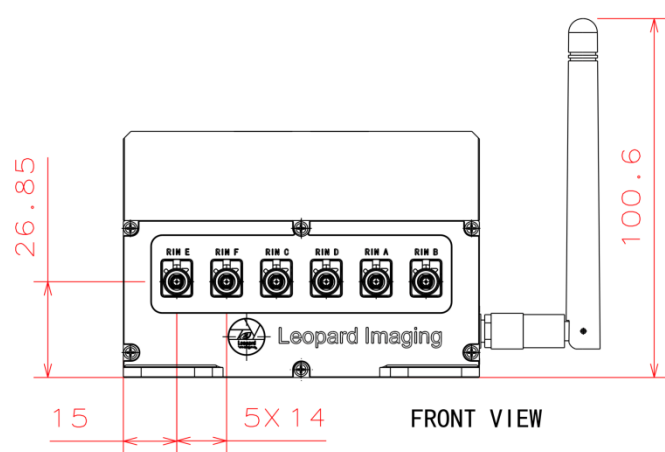


UP VIEW

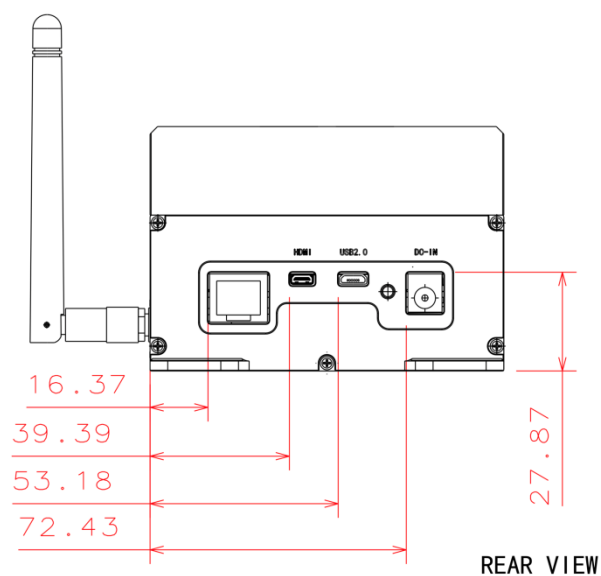


RIGHT VIEW

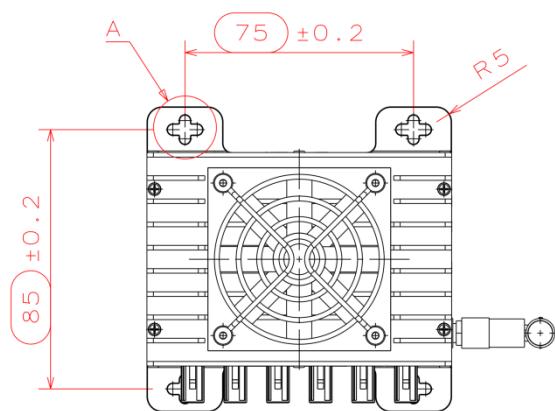
LEFT VIEW



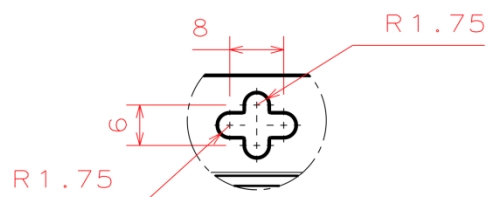
FRONT VIEW



REAR VIEW



DWON VIEW



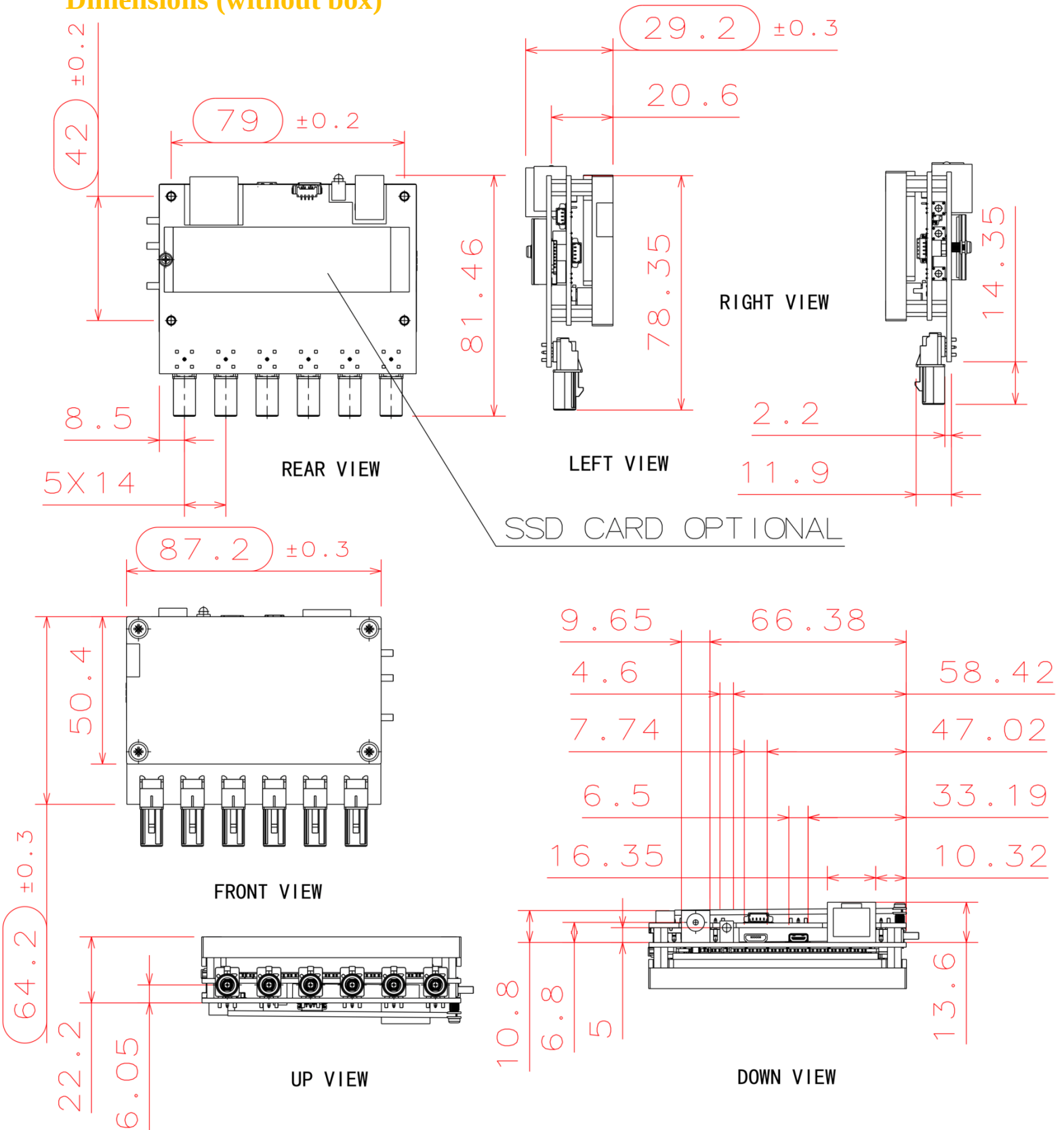
DETAIL A



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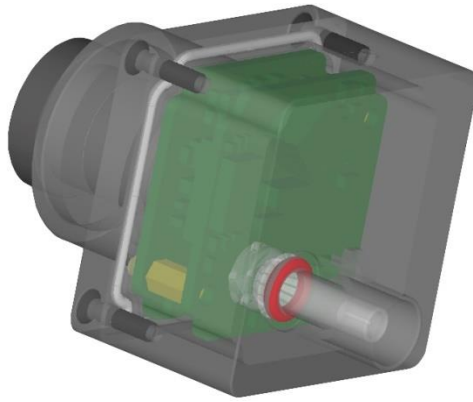
## Dimensions (without box)



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# LI-IMX185-GMSL2

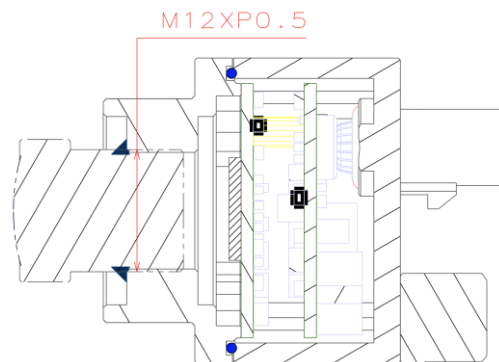
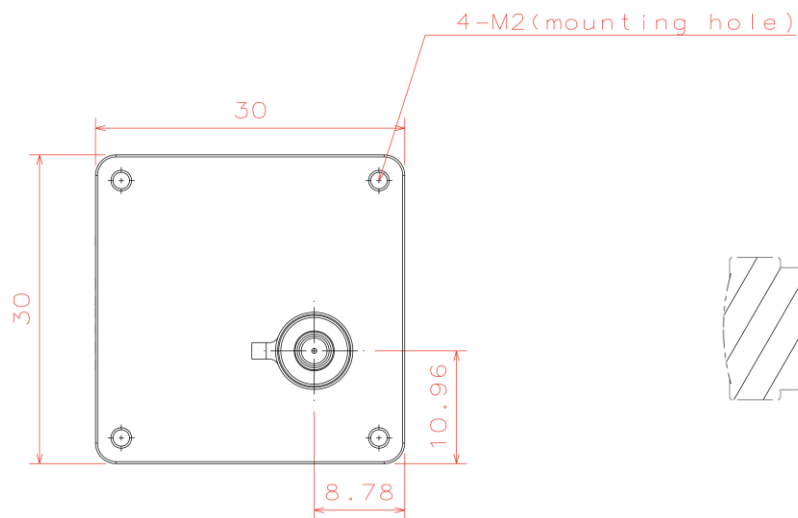
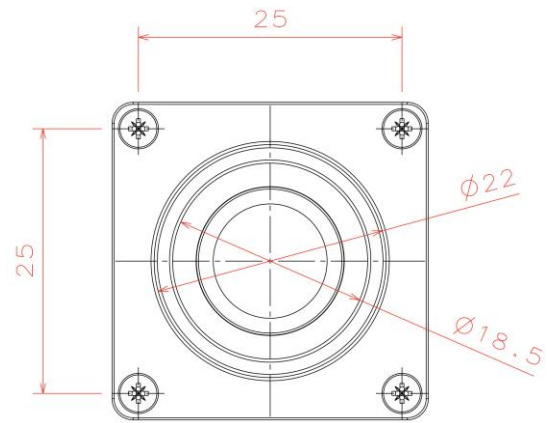
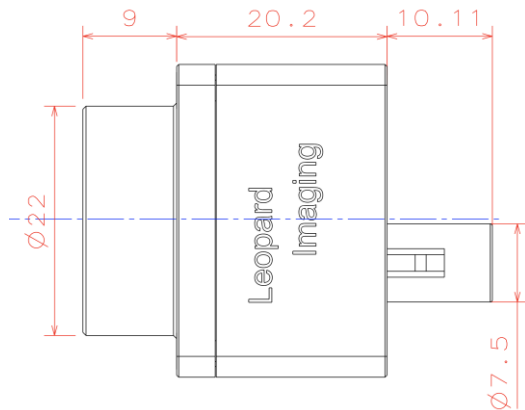
| Camera Spec                                                                                                                                                                                                                                |                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Image Sensor                                                                                                                                                                                                                               | Sony Diagonal 8.58mm Type 1/1.9 CMOS Image Sensor IMX185LQJ                          |
| Optical format                                                                                                                                                                                                                             | 1/1.9"                                                                               |
| Number of active pixels                                                                                                                                                                                                                    | 1937 (H) x 1217 (V)                                                                  |
| Pixel size                                                                                                                                                                                                                                 | 3.75um (H) x 3.75um (V)                                                              |
| Color or Mono                                                                                                                                                                                                                              | Color                                                                                |
| FOV                                                                                                                                                                                                                                        | 50 (H)                                                                               |
| ISP                                                                                                                                                                                                                                        | N/A                                                                                  |
| Format                                                                                                                                                                                                                                     | Raw output without compression (to TX2)                                              |
| Interface                                                                                                                                                                                                                                  | GMSL2 Serial interface                                                               |
| Lens mount                                                                                                                                                                                                                                 | M12                                                                                  |
| Weight                                                                                                                                                                                                                                     | 45 g                                                                                 |
| Operating Temp                                                                                                                                                                                                                             | -30 ~ 75 °C                                                                          |
| Storage Temp                                                                                                                                                                                                                               | -40 ~ 80 °C                                                                          |
| Water proof : IP67 (Up to IP69K) <b>Lens must be glued</b>                                                                                                                                                                                 |                                                                                      |
| <ul style="list-style-type: none"><li>▪ Metal Housing</li><li>▪ Water-proof M12 lens</li><li>▪ Sealed Gasket (White)</li><li>▪ Sealed O-ring (Red)</li></ul>                                                                               |   |
| Cable Connector                                                                                                                                                                                                                            |                                                                                      |
| <ul style="list-style-type: none"><li>▪ Housing Connector- FAKRA Z Type</li><li>▪ Cable length: 3 meters<br/>Support single Coax Cable transmit up to 12 meters</li><li>▪ Cable Part#: FAK-SMZSMZ-0008<br/>FAKRA type connectors</li></ul> |  |



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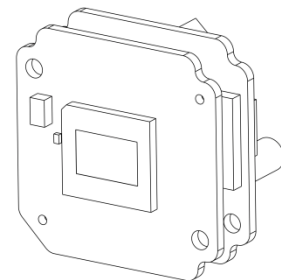
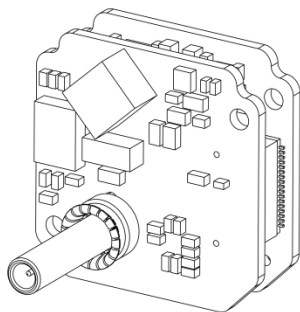
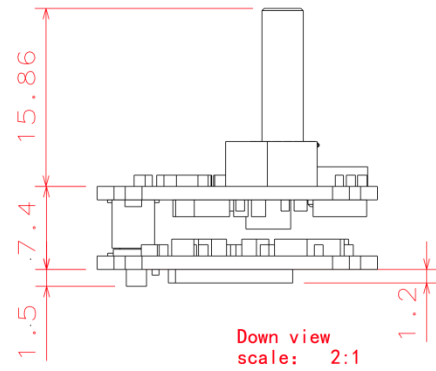
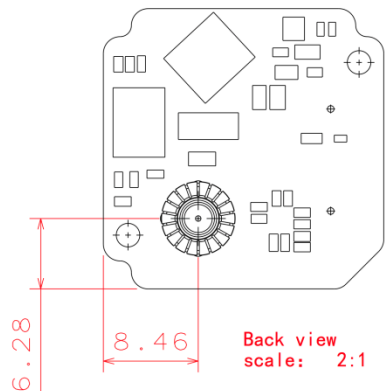
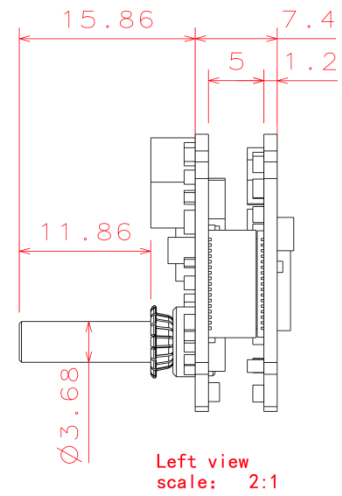
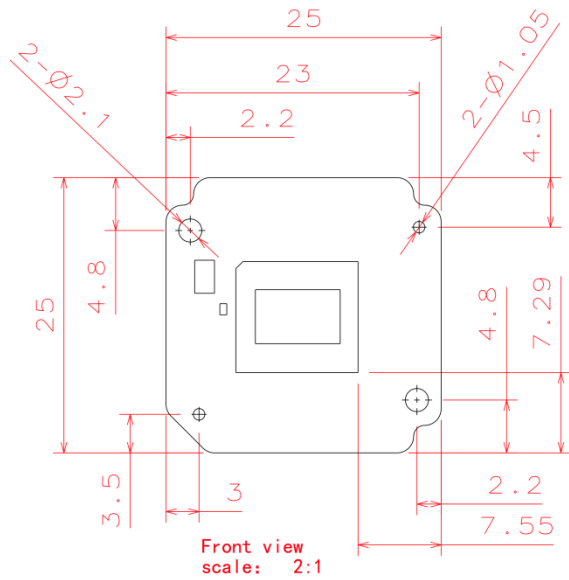
## Dimensions



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## Camera boards Dimensions



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## Revision History

| Revision | Description   | Release Date  |
|----------|---------------|---------------|
| 1.0      | First Release | 07. Mar. 2019 |



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