



**LEOPARD**  
IMAGING

# LI-AR0820-FPDLINKIII-xxxH

## Data Sheet

### Key Features

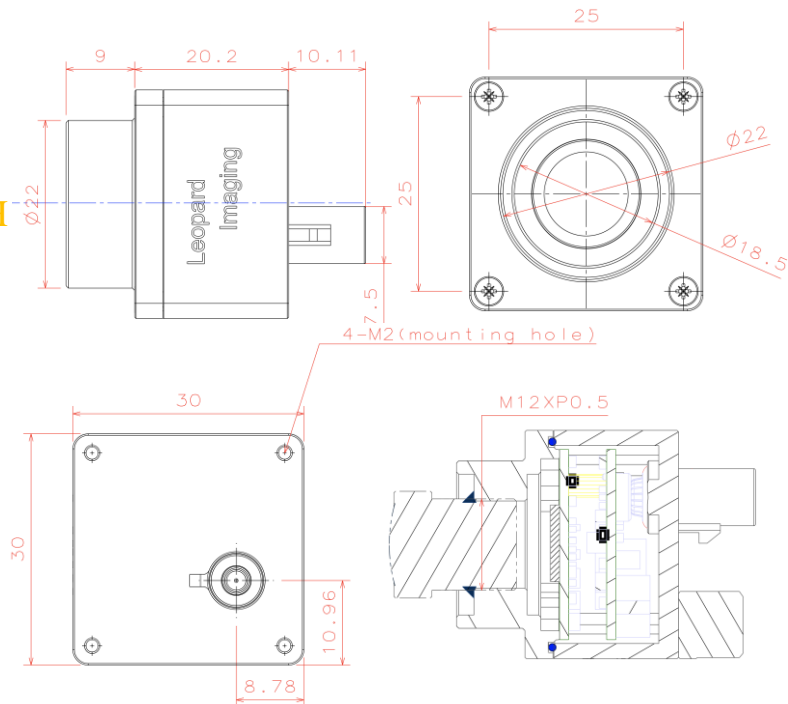
- ON SEMI AR0820 8.3M CMOS RCCB Sensor
- Optical format: 1/2"
- Number of active pixels: 3840H x 2160V
- Pixel size: 2.1 x 2.1  $\mu\text{m}$
- Output 12 bit RAW data
- Support 12V Power
- Lens: FOV H 60° / 110°
- TI953 FPD-Link III serializer
- Connector: FAKRA Z TYPE
- Water proof: IP67
- Operation Temp: -40°C ~ +85°C
- Storage Temp: -40°C ~ +125°C
- Size: 30 x 30 mm
- Weight: 45 g
- Part#: **LI-AR0820-FPDLINKIII-xxxH**



### Application

- High Performance ADAS (Automotive Driver Assistant System)
- Autonomous Driving

### Dimensions

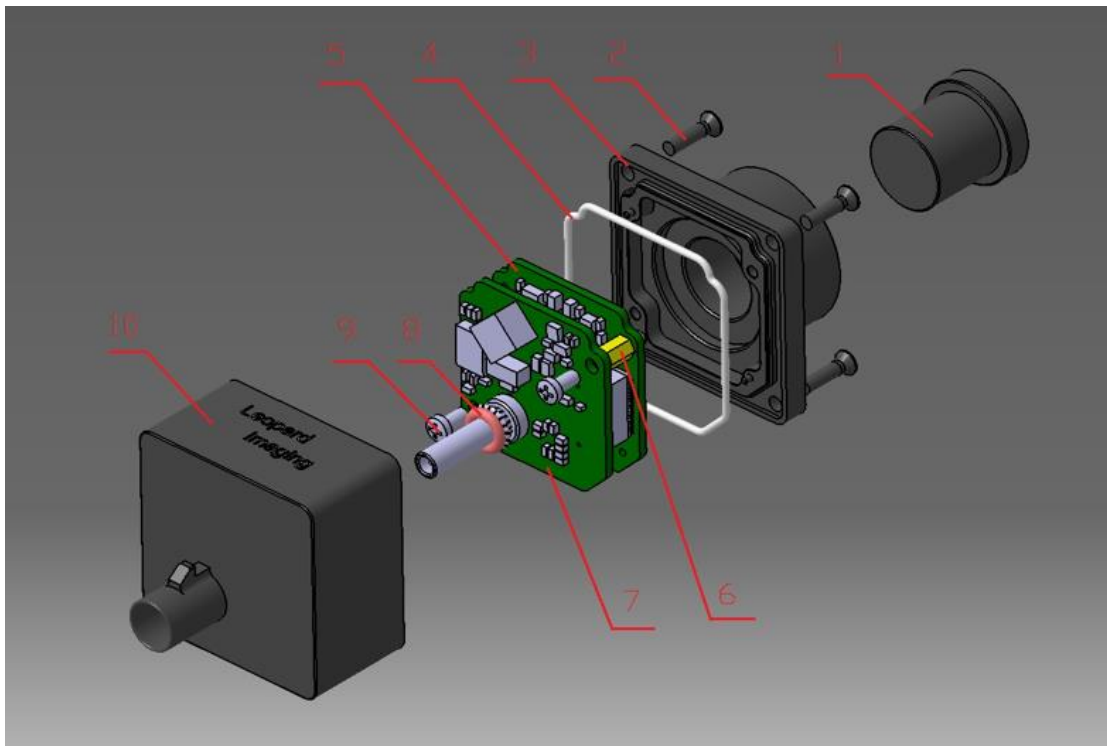


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## BOM

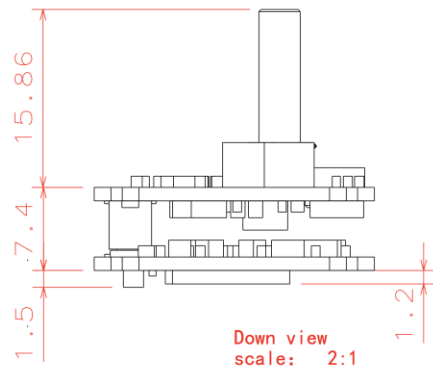
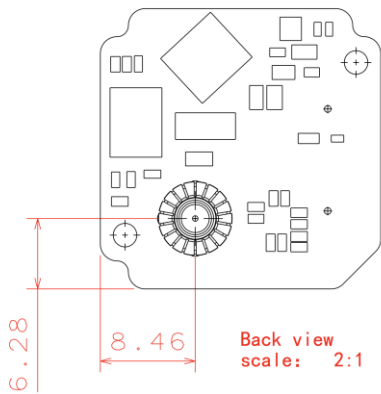
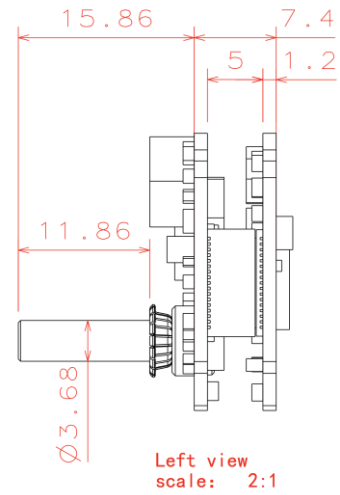
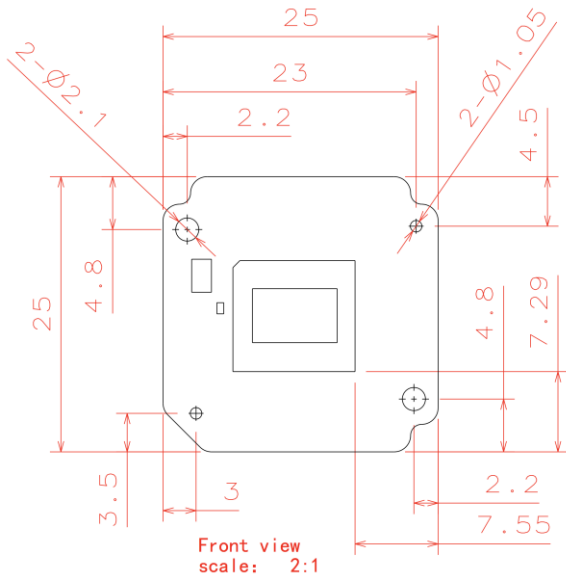
#	Name	SPEC	QTY/SET
1	Lens	M12 lens	1
2	Screw	M2*8 cross flat head black ZINC	4
3	Shell 2	AL6061-T6 BLACK Anodizing	1
4	Sealing ring	Silicon rubber, White	1
5	LI-AR0820-MIPI	AR0820 sensor board	1
6	Copper pillar	M2*5+3	2
7	LI-TI953-FKR	FPD-Link III serializer board	1
8	O ring	6.5*1.5 Silicon rubber Red	1
9	Screw	M2*4 cross pan head black ZINC	2
10	Shell 1	AL6061-T6 BLACK Anodizing	1



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# Camera boards Dimensions



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## Water Proof

- Metal Housing
- Water-proof M12 lens
- Sealed Gasket (White)
- Sealed O-ring (Red)

Note: The lens must be glued for water-proof.



## Cable Connector

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



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## Ordering Information

**Part#: LI-AR0820-FPDLINKIII-xxxH**

Note:

xxxH - 060H: FOV H 60°  
110H: FOV H 110°

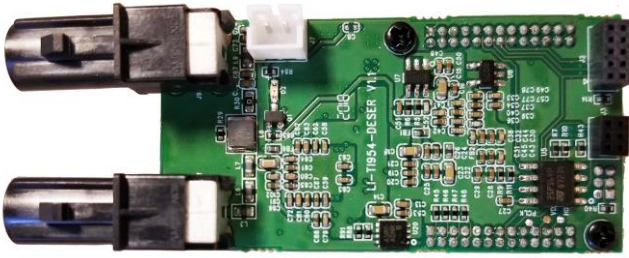
LI-AR0820-FPDLINKIII-060H	LI-AR0820-FPDLINKIII-110H
 A black, square-shaped camera lens assembly with a cylindrical lens protruding from the top. The base has four screws and the text "Leopard Imaging" is printed on the front face.	 A black, square-shaped camera lens assembly with a larger cylindrical lens protruding from the top. The base has four screws and the text "Leopard Imaging" is printed on the front face.
Lens EFL: 7.87 mm F/#: 1.8 FOV(D): 68° FOV(H): 59° FOV(V): 32.2°	Lens EFL: 4.47 mm F/#: 1.6 FOV(D): 125.8° FOV(H): 109.6° FOV(V): 54.8°



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## LI-TI954-DESER



Front View

## LI-USB30-CNTL



Back View

LI-AR0820-FPDLINKIII-xxxH can connect to USB 3.0 EVA module as a USB 3.0 camera.  
Part#: **LI-USB30-AR0820-FPDLINKIII-xxxH**

### Key Features

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliance
- Provide customization services
- 12VDC Power Supply
- Weight: 86 g
- Single Coax Cable transmit up to 12 meter PoC(Power over Cable)
- Support 3840 x 2160 @ 11 fps
- Power consumption: Approx. 80mA at 12VDC
- Support Windows, Linux OS and other OS which include UVC drivers

### SDK Supported

- Camera Tool Source Code in C#
- Capture & Display
- Save file as BMP & RAW format



## Revision History

Revision	Description	Release Date
1.0	First Release.	22. Aug. 2018
1.1	Update the 110H lens.	29. Apr. 2019
1.2	Update the 060H lens.	8 Jul. 2020
1.3	Update lens info.	10. Aug. 2023

