



**LEOPARD**  
IMAGING

# LI-OV10640-490-C<sup>2</sup>B-xxxH

## Data Sheet

### Key Features

- OmniVision CMOS 1.3MP HDR Sensor OV10640
- Optical format: 1/2.56"
- Active pixels: 1280 (H) x 1080 (V)
- Pixel size: 4.2 x 4.2  $\mu$ m
- Built-in ISP: OV490
- Sensor controlled by pre-loaded ISP binary automatically
- Tuned YUV data real time streaming
- Support HDR
- Support 10V ~ 15V Power
- ADV7992WBCPZ C<sup>2</sup>B Serializer
- Lens: FOV H 55° / 115°
- Connector: 0310681040
- Water proof: TBD
- Operation Temp: -40°C ~ +85°C
- Storage Temp: -40°C ~ +105°C
- Weight: ~50 g
- Part#:  
LI-OV10640-490-C<sup>2</sup>B-055H  
LI-OV10640-490-C<sup>2</sup>B-115H



### Application

- Autonomous driving
- Camera monitoring system
- Surround view system
- Rear view camera
- Blind spot detection



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## Ordering Information

**Part#: LI-OV10640-490-C<sup>2</sup>B-xxxH**

Note:

xxxH - 055H: FOV H 55°  
115H: FOV H 115°

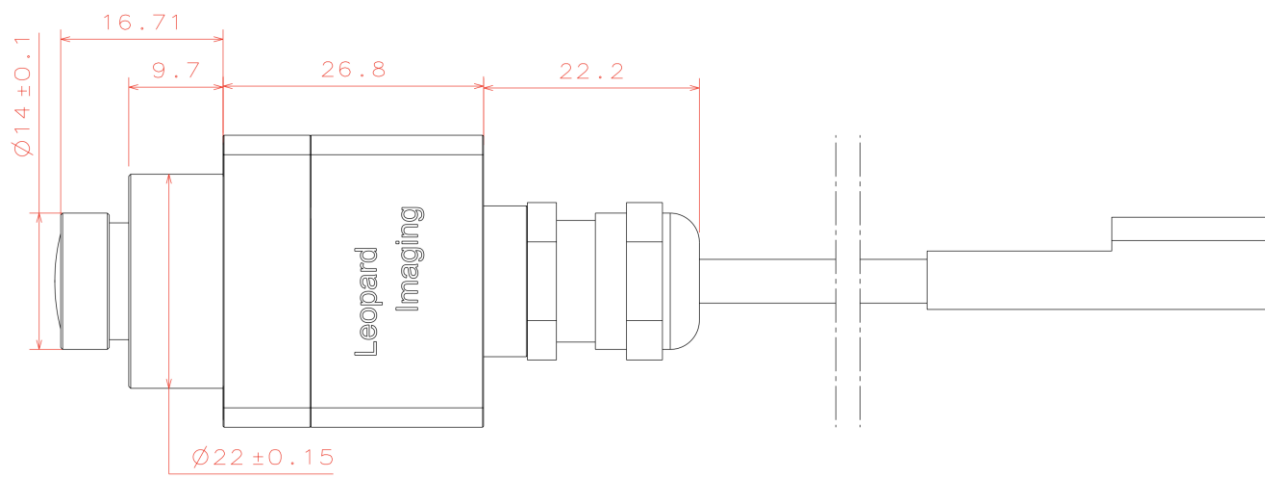
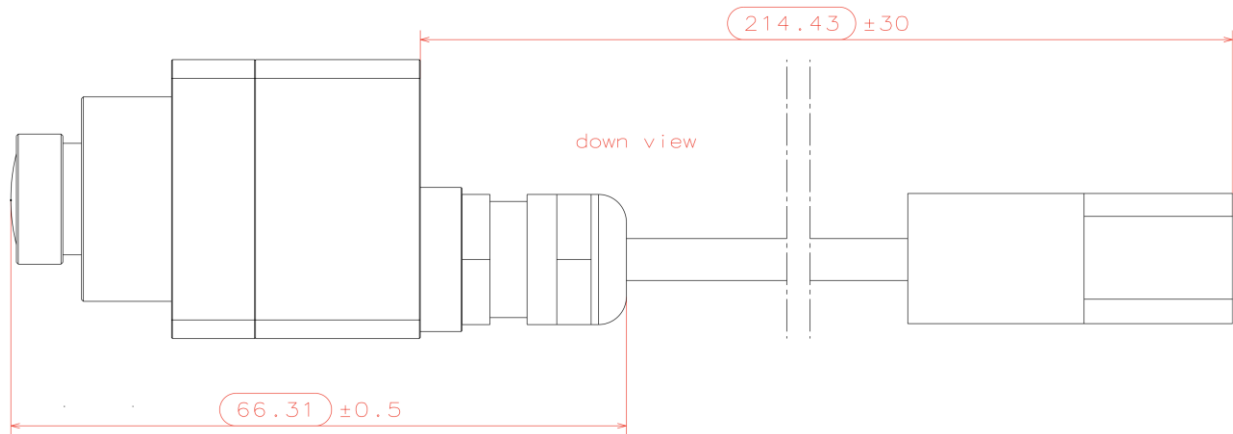
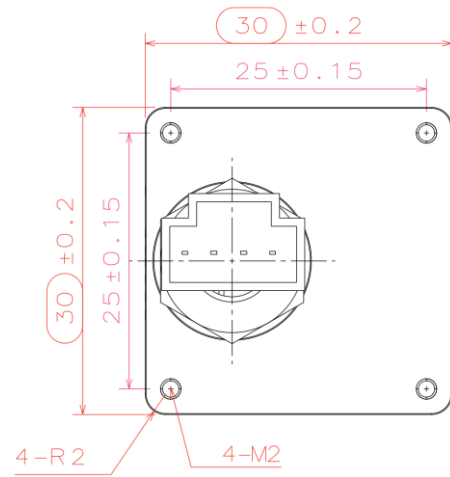
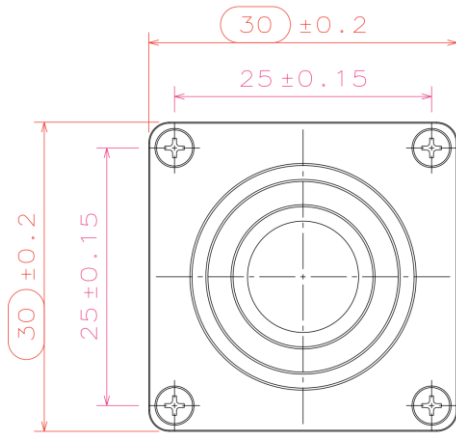
LI-OV10640-490-C <sup>2</sup> B-055H	LI-OV10640-490-C <sup>2</sup> B-115H
	
<p>Lens EFL: 6.0 mm FOV(D): 75° FOV(H): 55° FOV(V): 46° Mount: M12</p>	<p>Lens EFL: 2.8 mm FOV(D): 150° FOV(H): 114° FOV(V): 96° Mount: M12</p>



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# Dimensions



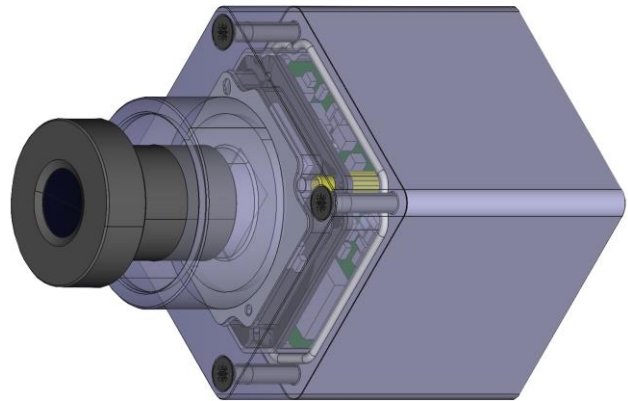
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## Water Proof

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

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



## Cable Connector

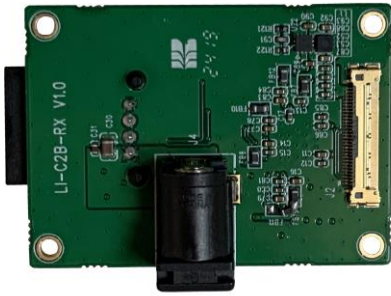
- Camera Connector:  
0310681040
- Mating connector:  
0310681010
- Support Cable transmit up  
to 30 meters



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## LI-C<sup>2</sup>B-RX



Front View



Back View

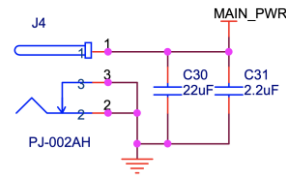
### C<sup>2</sup>B De-Serializer

De-Serializer Part#:

ADV7382WBCPZ

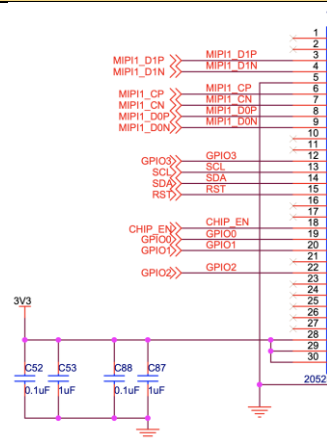
Interfaces J4 (External Power Input for C<sup>2</sup>B Camera)

- Part#: PJ-002AH
- Power Supply: 10V -15V DC



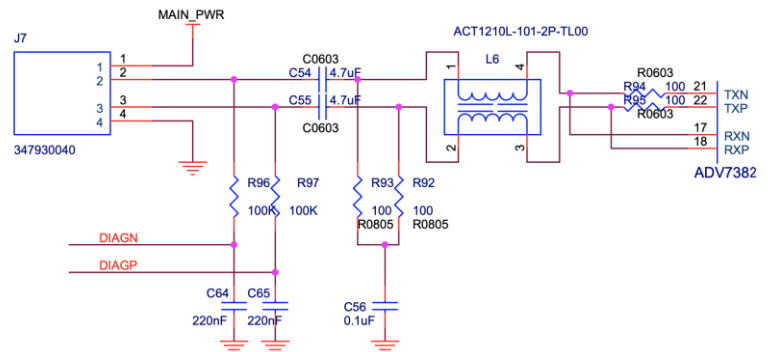
Interfaces J2 (MIPI Output)

- Part#: 20525-030E-02C
- Number of Positions: 30
- Pitch: 0.4mm
- Mating I-PEX cable: FAW-1233-xx

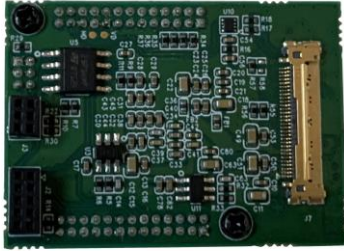


Interfaces J7 (C<sup>2</sup>B Serializer Input)

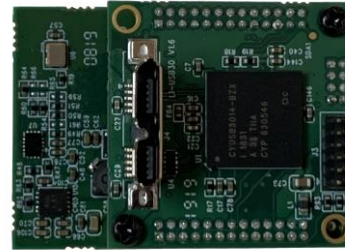
- Part#: 347930040
- Number of Positions: 4
- Pitch: 2.00 mm



# LI-USB30-CSLINK-IPX-TESTER



Front View



Back View

## BOM

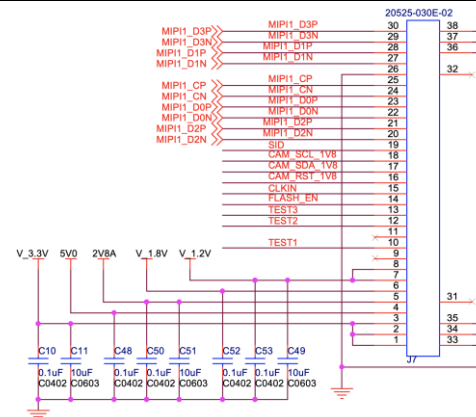
#	Items	QTY
1	LI-CSLINK-IPX-TESTER	1
2	LI-USB30-CNTL	1

## Main Chips

CrossLink FPGA (Convert MIPI to Parallel)	Lattice LIF-MD6000-6MG81I
USB 3.0 processor (Convert Parallel to USB 3.0)	Cypress FX3 CYUSB3014

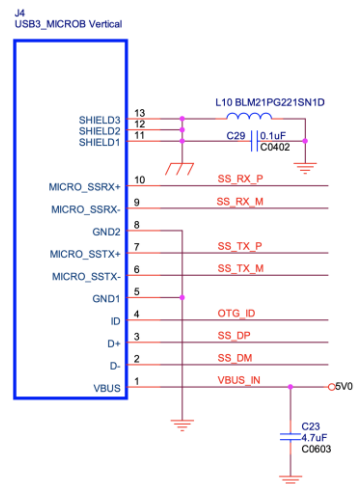
## Interfaces J7 (MIPI Input)

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4mm
- Mating I-PEX cable: FAW-1233-xx



## Interfaces J4 (USB 3.0 Output)

- Part#: 897-10-010-00-300002
- Connector Type: USB - micro B
- Number of Positions: 10
- Specifications: USB 3.0 (USB 3.1 Gen 1, Super speed)
- Mounting Feature: Vertical



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## LI-USB30-OV10640-490-C<sup>2</sup>B-xxxH

LI-OV10640-490-C<sup>2</sup>B-xxxH can connect to LI-C<sup>2</sup>B-RX and LI-USB30-CSLINK-IPX-TESTER as a USB 3.0 camera.

Part#: LI-USB30-OV10640-490-C<sup>2</sup>B-xxxH

### Key Features

- USB 3.0 Super Speed support
- YUV output without compression
- UVC compliance
- Provide customization services
- Support HDR
- Weight: TBD
- Resolution: 1280 x 1080, 1280 x 720
- Power consumption: TBD
- Supported by Windows, Linux and other OS with full UVC driver included.

### BOM

#	Items	QTY
1	LI-OV10640-490-C <sup>2</sup> B-xxxH	1
2	C <sup>2</sup> B Cable	1
3	LI-C <sup>2</sup> B-RX	1
4	FAW-1233-03 (300mm)	1
5	LI-USB30-CSLINK-IPX-TESTER	1
6	USB 3.0 cable	1
7	LI-PS12-01 (12V power supply)	1

### SDK Supported

- Camera Tool Source Code in C#
- Capture & Display



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## Revision History

Revision	Description	Release Date
1.0	First Release	16. Feb. 2020
1.1	Deleted lens model info.	11. Aug. 2023



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