



LEOPARD
IMAGING

LI-USB30-IMX585-MIPI-110H



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Key Features

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliant
- Color camera
- Supports M20 lens
- Allows customization
- USB + 5 VDC powered device
- Part#: **LI-USB30-IMX585-MIPI-110H**

Default Lens Specifications

Focal Length	5.9 mm
Aperture, F/#	2.9
Field of View (FOV)	110° horizontal
Distortion	0.2% F- θ
IR Filter	650 nm IR cut filter
Lens Mount	M20 x P0.5

Applications

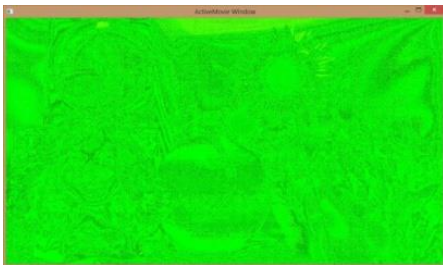
- IoT
- Drone
- Robots

SDK Supported

- Camera Tool Source Code in C#
- Capture & Display
- RAW to RGB Conversion
- Save file as BMP & RAW format
- Color Matrix
- Register access function

BOM

#	Items	QTY
1	LI-IMX585-MIPI-110H	1
2	LI-USB30 Main board	1
3	LI-CSLINK-IPX-TESTER	1
4	FAW-1233-02 (200 mm)	1



RAW Data Streaming

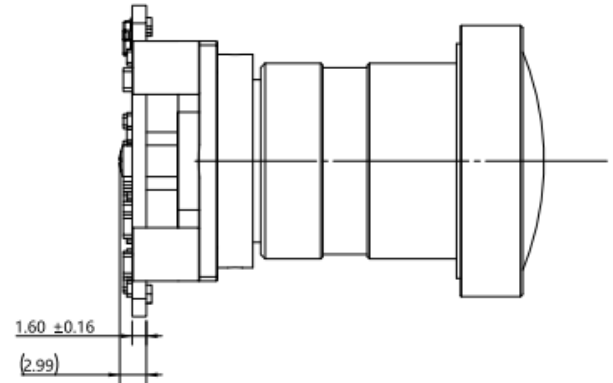
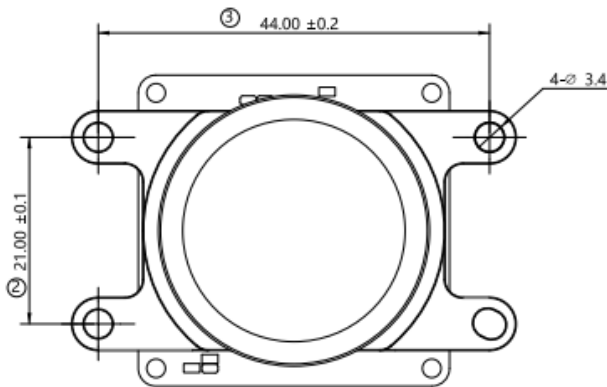
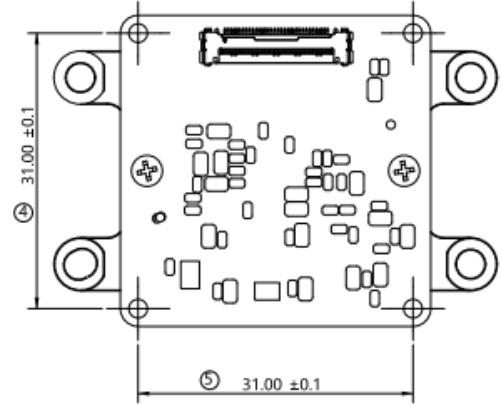
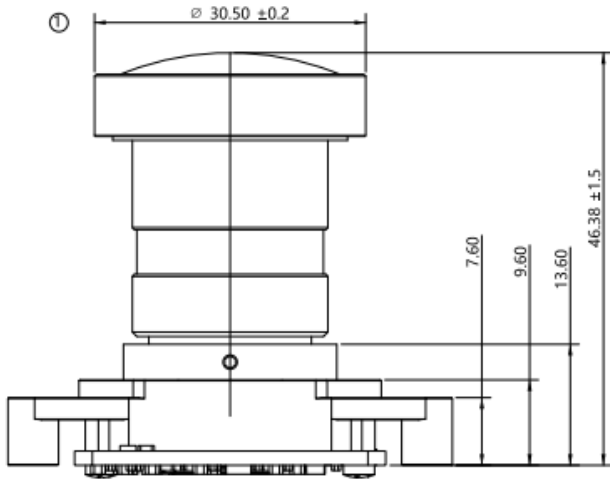


Camera Tool View Mode

SEPCIFICATIONS

General Behavior	
Video Resolution @ Frame Rate	3856 x 2180 @ 20 fps
Interface (Optical)	
IR Cut Filter (on lens)	650 nm IR cut filter
Sensor	Sony STARVIS2 Diagonal 12.84 mm CMOS Active Pixel Type Sensor IMX585
Shutter	Rolling
Color / Mono	Color
Format	1/1.2"
Active Pixels	3856 (H) x 2176 (V)
Pixel Size	2.9 x 2.9 μm
Lens Mount	M20
Interface (Electrical)	
Interface	USB 3.0
Supply Voltage	USB 3.0 +5 VDC power source
Current Consumption	415 mA @ 5 VDC (3856 x 2180 @ 20 fps)
Weight	
LI-IMX585-MIPI-110H + LI-USB30 Main board + LI-CSLINK-IPX-TESTER (Without cable)	~ 74 g
Adjustment (Manual)	
Shutter	TBD
Gain	TBD
Register Access	Yes
Temp Info (LI-IMX675-MIPI-076H)	
Operating Temp	-30°C ~ +85°C
Storage Temp	-30°C ~ +85°C
Supported OS	
Windows OS, Standard Linux OS and other OS with full UVC drivers	

DIMENSIONS: LI-IMX585-MIPI-110H



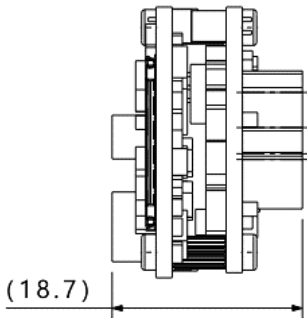
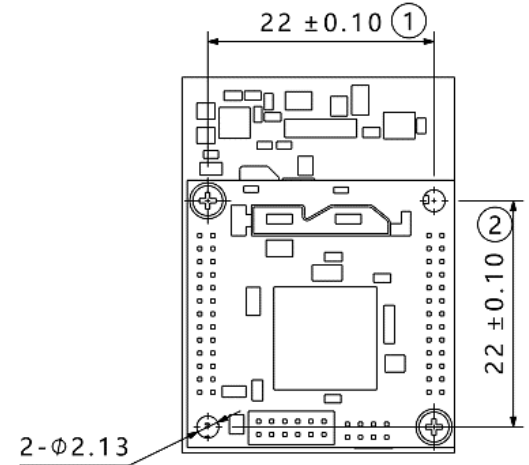
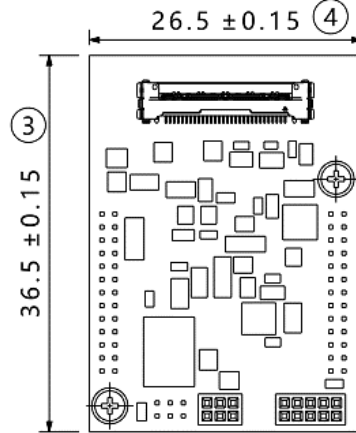
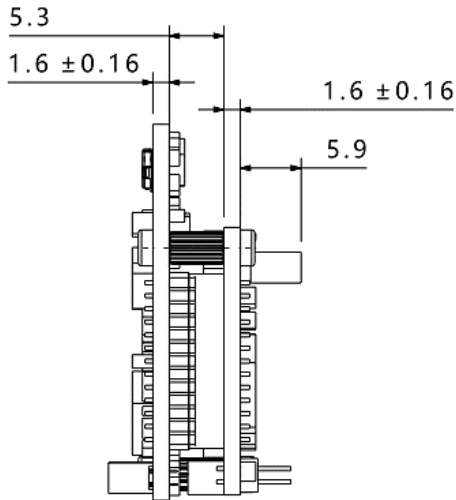
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
$0.5 < X \leq 3$	± 0.1	$0.5 < X \leq 3$	± 0.2	$X \leq 10$	$\pm 1^\circ$
$3 < X \leq 6$	± 0.1	$3 < X \leq 6$	± 0.5	$10 < X \leq 50$	$\pm 30'$
$6 < X \leq 30$	± 0.2	$6 < X \leq 30$	± 1	$50 < X \leq 120$	$\pm 20'$
$30 < X \leq 120$	± 0.3	X > 30	± 2	$120 < X \leq 400$	$\pm 10'$
$120 < X \leq 400$	± 0.5			X > 400	$\pm 5'$
$400 < X \leq 1000$	± 0.8				
$X > 1000$	± 1.2				

NOTE:

- ⊗ marked are important sizes.
- Recommend to use 4x $\varnothing 3$ holes for camera assembly
- Tolerances for the unmarked refer to the Tolerance table.
- All materials are compliant with RoHS requirements.

Unit: mm

DIMENSIONS: LI-USB30 Main Board + LI-CSLINK-IPX-TESTER



TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

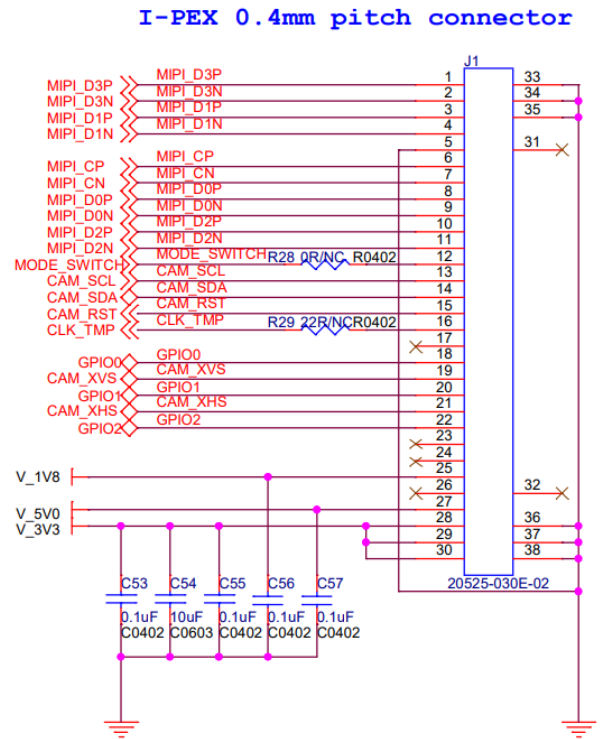
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Unit: mm

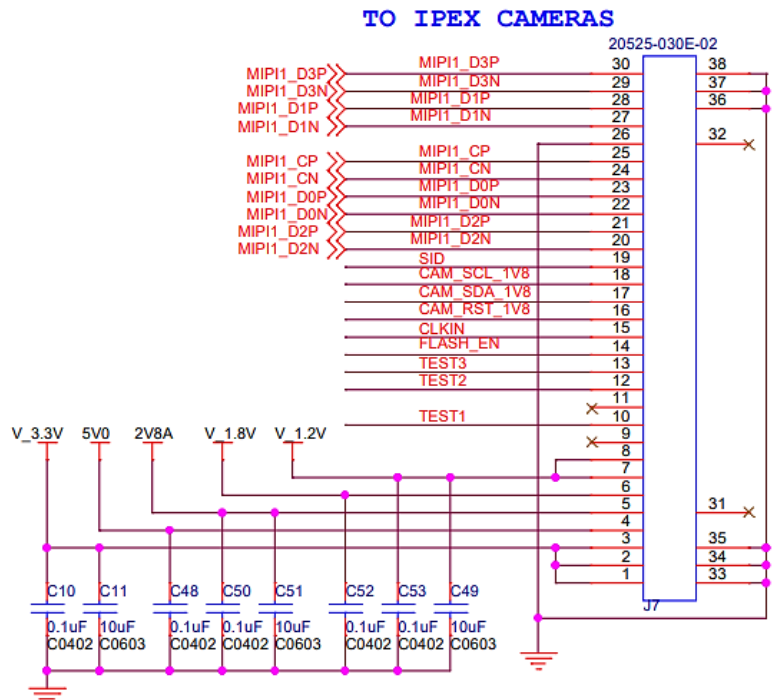
LI-IMX585-MIPI-110H INTERFACE (MIPI Connector)

- Connector Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX cable: LI-FAW-1233
- Sensor I2C Address: 0x34 (8-bit)
- External Power Supply: 3.3V, 5.0V
- 3.3V (analog), 1.8V and 1.1V are generated from board



LI-CSLINK-IPX-TESTER INTERFACE (To Cam)

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



● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	24 Jan 2024

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