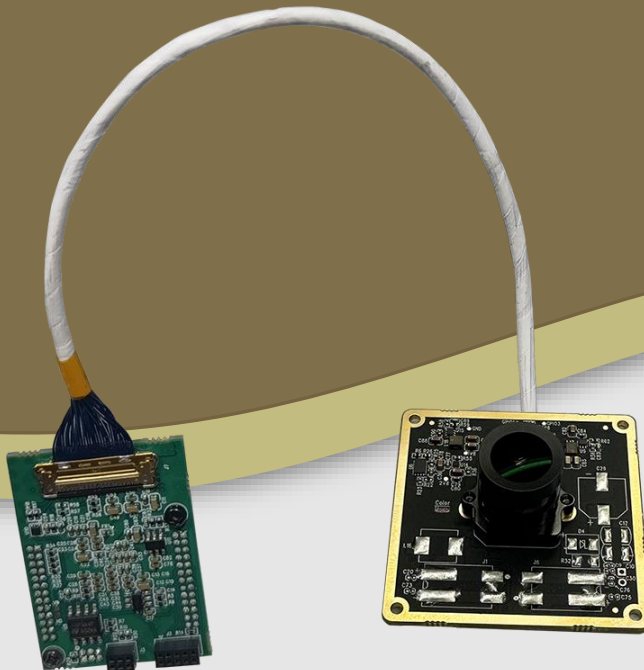




LEOPARD
IMAGING

LI-USB30-VB1940-MIPI-120H



Address:

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USA



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+1 (408)217-1960



Sales:

sales@leopardimaging.com

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Key Features

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliant
- Color camera
- Supports M12 lens
- Allows customization
- USB + 5 VDC powered device
- Part#: **LI-USB30-VB1940-MIPI-120H**

Lens Specifications

Effective focal Length	2.94 $\pm$ 5% mm
Aperture, F/#	2.0 $\pm$ 5
Field of View (FOV)	120° horizontal
IR Filter	Visible + 940 nm band pass filter
Relative Illumination	(49.4 $\pm$ 5) %
Optical Distortion	-79% $\pm$ 5%
Lens Mount	M12 x P0.5

Applications

- Robotic Vision
- Autonomous Driving
- Driver Monitoring System
- Occupant Monitoring System

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

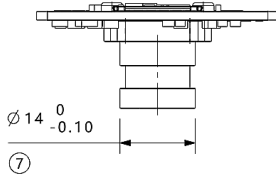
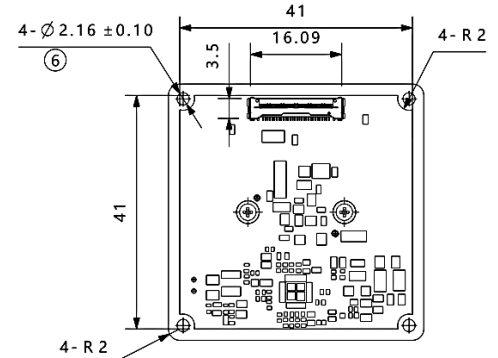
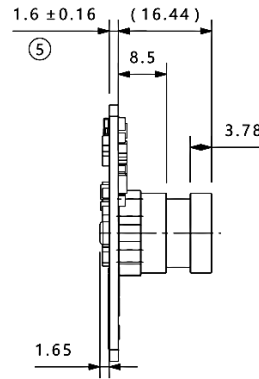
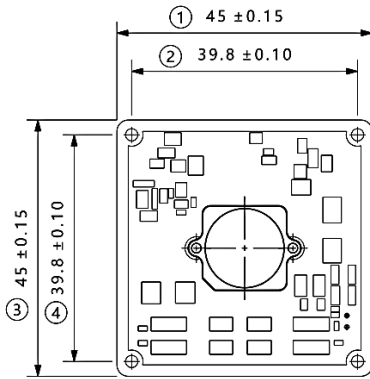
BOM

#	Items	QTY
1	LI-VB1940-MIPI-120H	1
2	LI-USB30 Main board	1
3	LI-CSLINK-IPX-TESTER	1
4	FAW-1233-02 (200 mm)	1

SEPCIFICATIONS

General Behavior	
Video Resolution @ Frame Rate	2560 x 1984 @ 20 fps
Interface (Optical)	
IR Cut Filter (on lens)	Visible + 940 nm band pass filter
Sensor	5.1MP Global Shutter RGB NIR Sensor
Format	1/2.5"
Shutter Type	Global shutter
Active Pixels	2560 (H) x 1984 (V)
Pixel Size	2.25 μm x 2.25 μm
Lens Mount	M12
Interface (Electrical)	
Interface	USB 3.0
Supply Voltage	USB 3.0 +5 VDC power source
Current Consumption	180 mA @ 5V (2560 x 1984 @ 20 fps)
Weight	
LI-VB1940-MIPI-120H + LI-USB30 Main board + LI-CSLINK-IPX-TESTER (Without cable)	~ 32 g
Adjustment (Manual)	
Shutter	Support
Gain	Support
Register Access	Support
Temp Info (LI-VB1940-MIPI-120H)	
Operating Temp	-30°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Supported OS	
Windows OS, Standard Linux OS and other OS with full UVC drivers	

DIMENSIONS: LI-VB1940-MIPI-120H



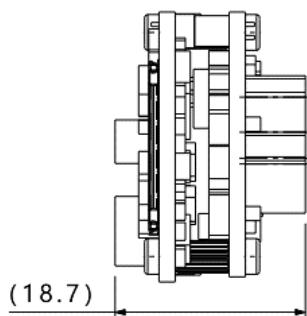
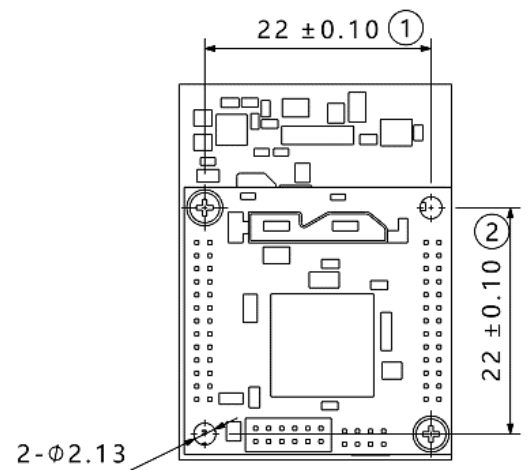
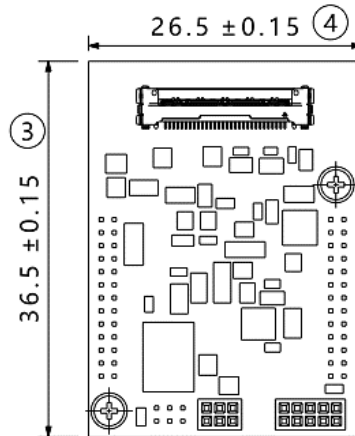
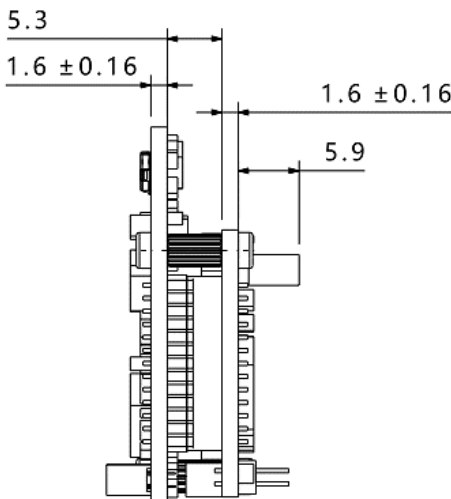
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
$0.5 < X \leq 3$	± 0.1	$0.5 < X \leq 3$	± 0.2	$X \leq 10$	$\pm 1^\circ$
$3 < X \leq 6$	± 0.1	$3 < X \leq 6$	± 0.5	$10 < X \leq 50$	$\pm 30'$
$6 < X \leq 30$	± 0.2	$6 < X \leq 30$	± 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.
- 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
$0.5 < X \leq 3$	± 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				

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Unit: mm

- REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	23 May 2025

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