



LEOPARD
IMAGING

LI-VENUS-IMX623-FP3-195H-R1



Address:

910 Auburn Ct,
Fremont, CA 94538
USA



Phone:

+1 (408)263-0988

Fax:

+1 (408)217-1960



Sales:

sales@leopardimaging.com

Support:

support@leopardimaging.com

INTRODUCTION

The LI-VENUS-IMX623-FP3-195H-R1 is equipped with Sony diagonal 7.45 mm (Type 1/2.42) CMOS solid-state RGGB image sensor IMX623 and FPD-Link III serializer TI953. This camera outputs RAW data.

SPECIFICATIONS

Sensor	Sony Diagonal 7.45 mm CMOS Solid-State RGGB Sensor IMX623
Optical Format	1/2.42"
Resolution	1937 (H) x 1553 (V) (active pixels)
Pixel Size	3.0 μm x 3.0 μm
Output Format	12-bit / 14-bit / 16-bit / 20-bit / 24-bit RAW
Color / Mono	Color sensor
Maximum Frame Rate	60 fps @ 1936 x 1556
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Serializer	TI953 FPD-Link III (DS90UB953-Q1)
Power Supply Range	8 ~ 17 VDC
Connector	FAKRA Z TYPE
IP Rating	IP67
Power Consumption	77 mA @ 12 VDC (1936 x 1552 @ 30 fps)
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	~ 32 g
Part#	LI-VENUS-IMX623-FP3-195H-R1



APPLICATIONS

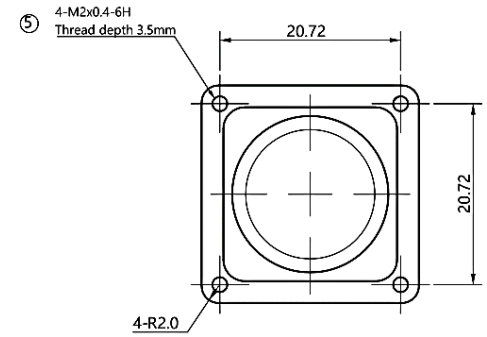
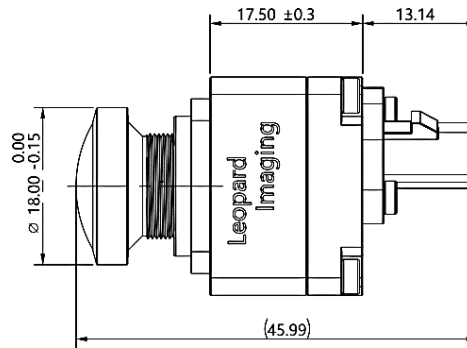
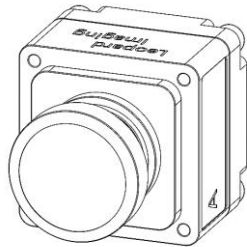
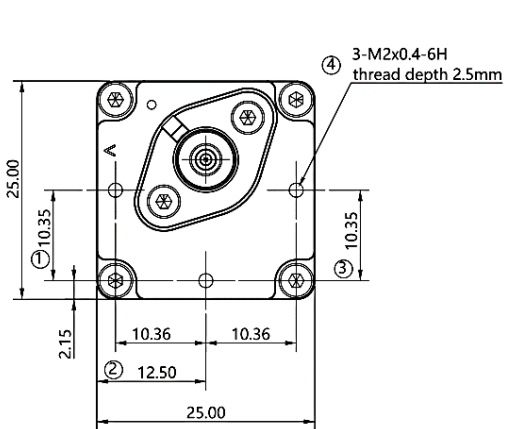
- Automotive
 - ◆ Autonomous Driving
 - ◆ Assisted Driving
 - ◆ Digital Video Recording
 - ◆ Machine Vision

LENS SPECIFICATIONS

Effective Focal Length	1.51 mm $\pm$ 5%
Aperture, F/#	2.0 $\pm$ 5%
Field of View (FOV)	195° horizontal
F- θ Distortion	-154.2% ($y = 3.025$ mm)
Relative Illumination	37% ($y = 3.025$ mm)
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5



DIMENSIONS



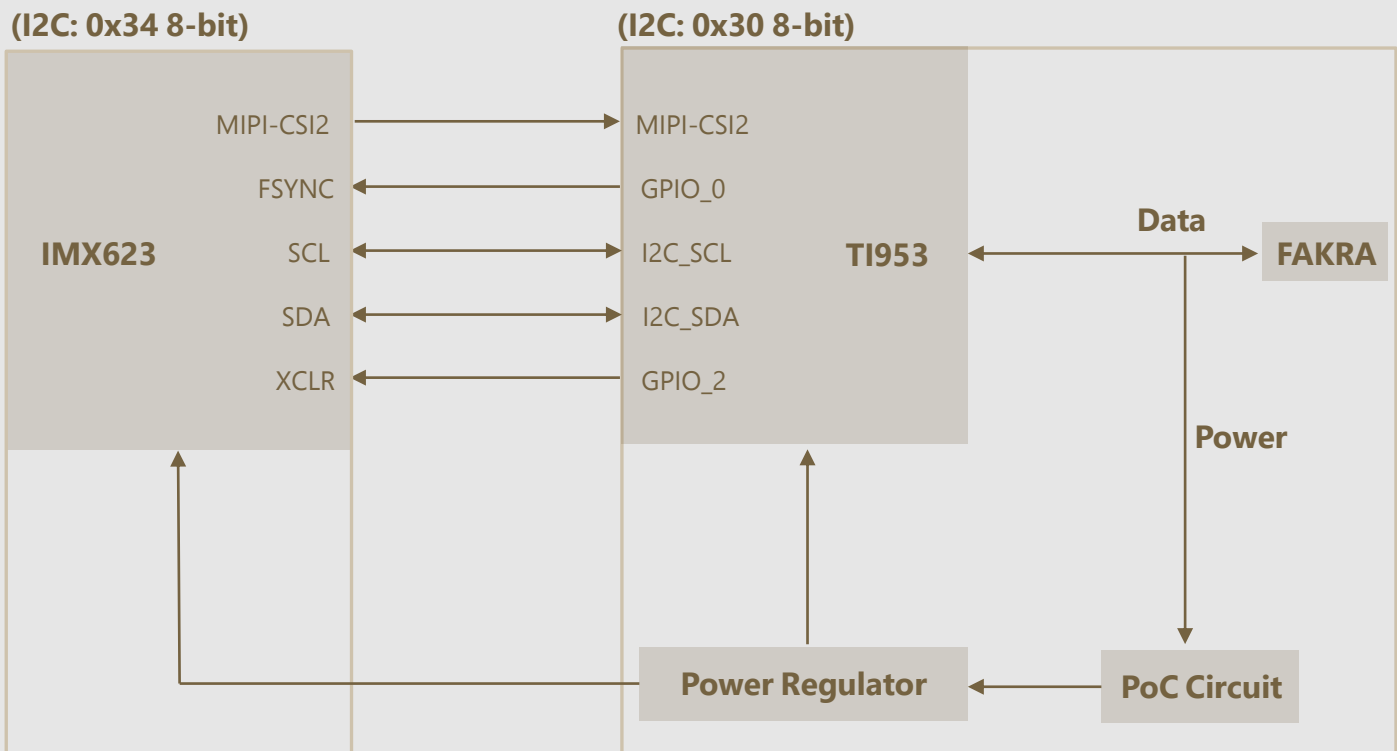
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3			120 < X ≤ 400	±10'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

NOTE:

- ⊗ marked are important sizes.
- Tolerances for others unmarked – refer to the Tolerance Table.
- All materials are compliant with RoHS requirements

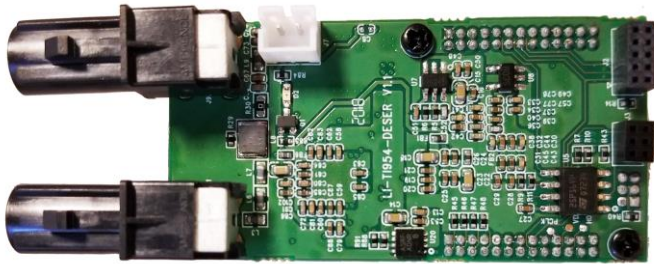
Unit: mm

SYSTEM BLOCK DIAGRAM



USB3.0 CAMERA KIT

LI-FPDLINKIII-USB



Top View



Bottom View

The LI-VENUS-IMX623-FP3-195H-R1 camera can connect to LI-FPDLINKIII-USB as a USB 3.0 camera.

Part#: **LI-USB30-VENUS-IMX623-FP3-195H-R1**

SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Allows customization
- 12 VDC Power Supply for camera
- Weight: ~ 64 g (LI-FPDLINKIII-USB + LI-VENUS-IMX623-FP3-195H-R1)
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1936 x 1552 @ 30 fps
- Power consumption: 77 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers



BOM

#	Items	QTY
1	LI-VENUS-IMX623-FP3-195H-R1	1
2	LI-FPDLINKIII-USB	1
3	3-Meter Fakra Cable	1
4	12 VDC Power Supply	1
5	USB3.0 Cable	1

SDK SUPPORTED

- Camera Tool Source Code in C#
- Capture & Display
- Register Access Function

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Cameras & Camera Modules](#) ***category:***

Click to view products by [Leopard Imaging](#) ***manufacturer:***

Other Similar products are found below :

[1202](#) [73-540-420I](#) [Web Camera module 5.0M pixel](#) [LI-USB30-OX05B1S-VCSEL-OMS-96717-200H](#) [LI-USB30-IMX490-GMSL2-120H](#) [LI-USB30-OV2312-GMSL2-110H](#) [LI-IMX675-MIPI-076H](#) [82635DSD456](#) [LI-AR0234CS-GMSL2-OWL](#) [5390](#) [5389](#) [107821](#) [LI-IMX728-9295-070H](#) [OAK-1-W-PoE](#) [LI-AR0341-GM2B-124H](#) [LI-IMX563-MIPI-AF](#) [LI-VENUS-OX03F10-OAX40-GM2A-060H](#) [STC-MCS163U3V](#) [LI-OG01A1B-MIPI-146D](#) [LI-VB1940-VCL-OMS-FP3-137H](#) [106681](#) [107402](#) [108010](#) [1202](#) [AC164150](#) [SEN0158](#) [2392](#) [106695](#) [106988](#) [107146](#) [106732](#) [LI-USB30-AR023ZWDR](#) [LI-OV2640-USB-M6](#) [LI-OV5640-MIPI-AF-NIR](#) [82635DSASMDLPRQ](#) [106692](#) [106687](#) [106493](#) [106688](#) [106682](#) [106694](#) [106989](#) [106693](#) [106696](#) [106683](#) [107140](#) [106982](#) [106685](#) [107141](#) [107147](#)