



# LI-IMX390-GW5400-FPDLINKII-xxxH



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## INTRODUCTION

The LI-IMX390-GW5400-FPDLINKIII-xxxH is equipped with Sony diagonal 6.67 mm (Type 1/2.7) CMOS RGGB image sensor IMX390, GEO Semiconductor GW5400 ISP and FPD-Link III serializer TI953. This camera outputs YUV data.

## SPECIFICATIONS

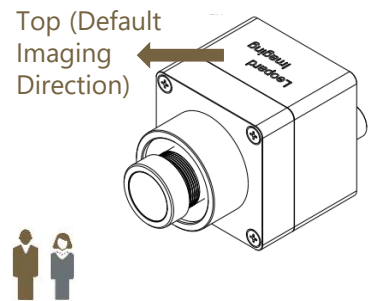
Sensor	Sony Diagonal 6.67mm (Type 1/2.7) CMOS RGGB Image Sensor IMX390
Optical Format	1/2.7"
Resolution	1920 (H) x 1080 (V) (based on ISP binary)
Pixel Size	3.0 x 3.0 $\mu$ m
Output Format	YUV output without compression
ISP	GEO Semi GW5400
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Lens	FOV H 40° / 120°
IP Rating	120H: IP67 040H: Not waterproof
Color / Mono	Color sensor
Frame Rate	60 fps @ 1920 x 1080
Serializer	TI953 FPD-Link III (DS90UB953-Q1)
Power Supply Range	9 ~ 19 VDC
FAKRA Connector	FAKRA Z TYPE
Power Consumption (1920 x 1080 @ 60 fps)	Approx. 193 mA @ 12 VDC
Operating Temp	TBD
Storage Temp	TBD
Weight	~ 50 g
Part#	LI-IMX390-GW5400-FPDLINKIII-xxxH

## APPLICATIONS

- Automotive ADAS
- 1080p Video Applications
- ADAS + Viewing Fusion

## DEFAULT IMAGING DIRECTION

- The logo "Leopard Imaging" is on the TOP.

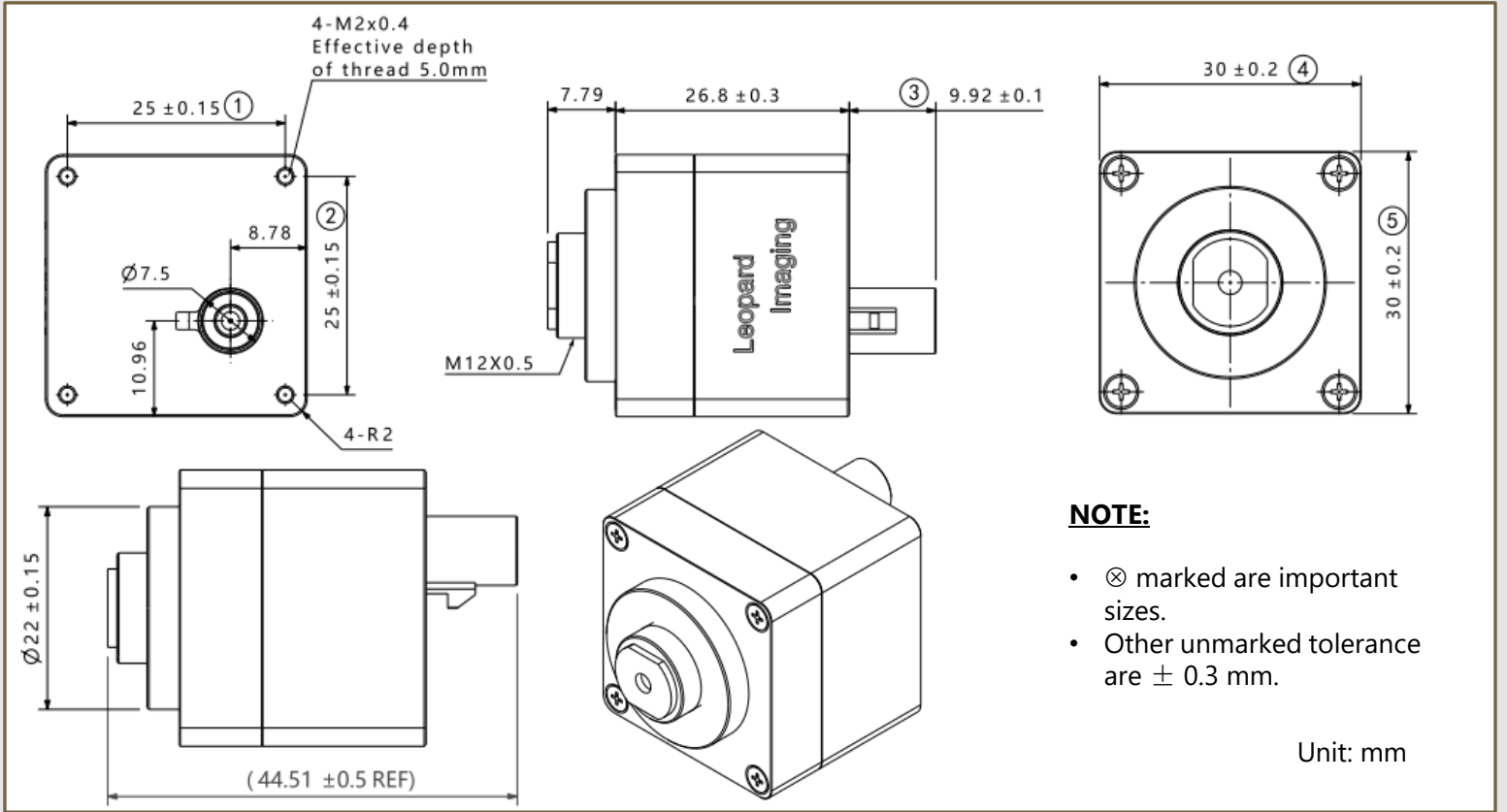


## CABLE CONNECTOR

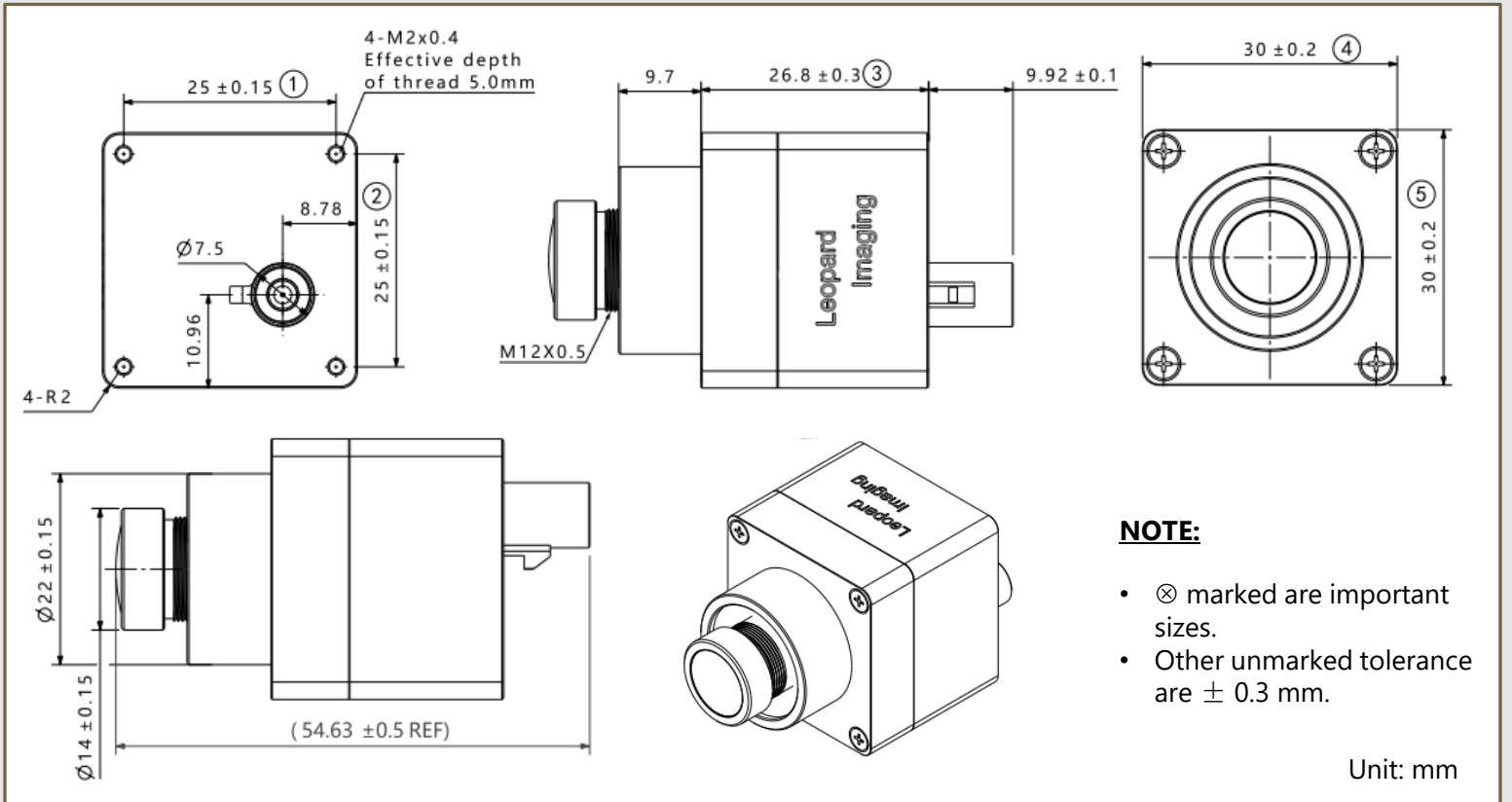
- Housing Connector: FAKRA Z Type
- Cable Length: 3 meters
- Cable Part#: FAK-SMZSMZ-3M



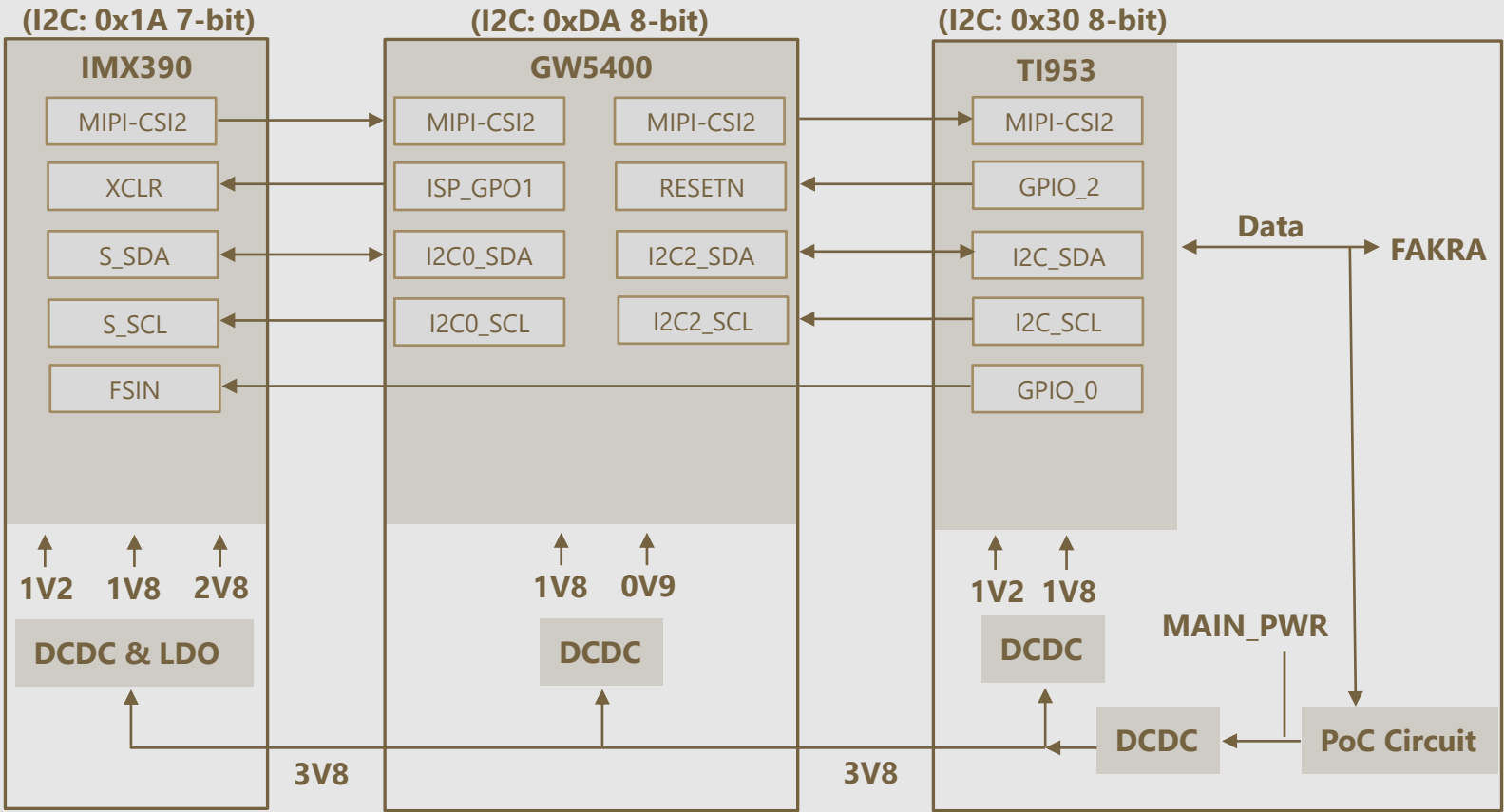
## DIMENSIONS: LI-IMX390-GW5400-FPDLINKIII-040H



## DIMENSIONS: LI-IMX390-GW5400-FPDLINKIII-120H



# BLOCK DIAGRAM



## ORDERING INFORMATION

**NOTE:**

xxxH refers to 040H (FOV H 40° ), or 120H (FOV H 120° )

**LI-IMX390-GW5400-FPDLINKIII-040H**



**LI-IMX390-GW5400-FPDLINKIII-120H**



Lens EFL: 7.5 mm	Lens EFL: 2.8 mm
Aperture, F/#: 2.8	Aperture, F/#: 2.8
Field of View (FOV): 47° (D) / 41° (H) / 23.5° (V)	Field of View (FOV): 148° (D) / 122° (H) / 74° (V)
Mount: M12	Mount: M12
Waterproof: No	IP Rating: IP67

# USB3.0 CAMERA KIT

LI-FPDLINKIII-FP-USB-BOX



Front View



Side View

LI-IMX390-GW5400-FPDLINKIII-xxxH can connect to LI-FPDLINKIII-FP-USB-BOX as a USB 3.0 camera.

Part#: **LI-USB30-IMX390-GW5400-FPDLINKIII-xxxH**

## SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Supports WDR
- Allows customization
- 12 VDC power supply for camera
- Weight: ~ 178 g
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 1920 x 1080 @ 60 fps
- Power consumption: Approx. 193 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers



## BOM

#	Items	QTY
1	LI-IMX390-GW5400-FPDLINKIII-xxxH	1
2	LI-FPDLINKIII-FP-USB-BOX	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
- ISP Rom Update

## ● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	20 Nov 2018
0.2	Added E3292B-R3 HFOV 120 lens.	08 Jan 2019
0.3	Added DSL958 HFOV 70 lens.	13 Aug 2019
0.4	Removed 040H and 070H lens.	30 Dec 2020
0.5	Added 040H lens and changed USB3.0 Tester to FP version.	30 Jan 2021
0.6	1. Replaced GW5200 with GW5400. 2. Added 2D dimensions for 040H camera and 120H camera. 3. Added "DEFAULT IMAGING DIRECTION" part. 4. Added Pinout Connections diagram.	29 Jun 2022

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