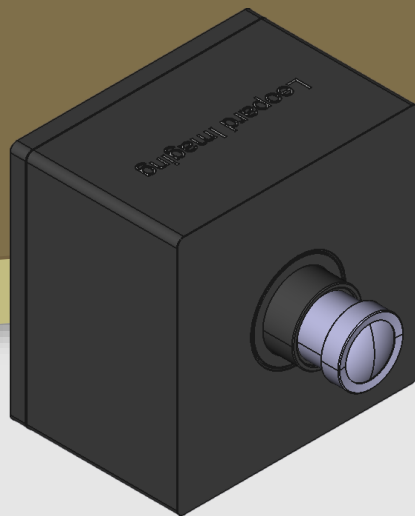




LEOPARD
IMAGING

LI-OG05B20-YUV-GM2B-090H



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INTRODUCTION

The LI-OG05B20-YUV-GM2B-090H is a high resolution global shutter GMSL2 camera. It is equipped with OmniVision 1/2.53" CMOS 5MP global shutter image color sensor OG05B20 which features with PureCel[®]plus-S and Nyxel[®] technologies, ISP and ADI GMSL2 MAX96717. It has a dedicated Inbuilt high-performance Image Signal Processor (ISP) chip tuned to bring out the best-in-class image quality and color reproduction, making it adaptable to different lighting conditions. This camera outputs YUV image data.

KEY FEATURES

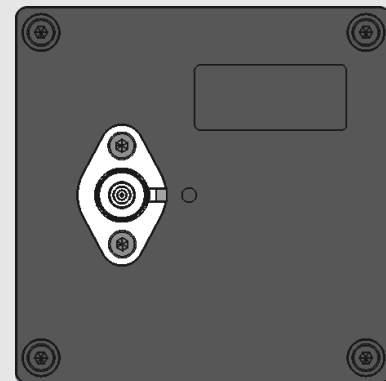
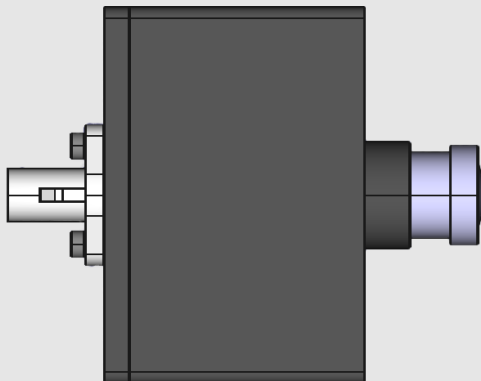
Maximum Frame Rate	60 fps @ full size
Data Format	YUV422
Sensor	OmniVision 1/2.53" CMOS 5MP image sensor OG05B20
Optical Format	1/2.53"
Shutter Type	Global shutter
Pixel Size	2.2 x 2.2 μ m
Color / Mono	Color
Resolution	2592 (H) x 1944 (V) (active pixels)
ISP	Included
Serializer	ADI MAX96717
Connector	FAKRA Z TYPE
Operating Temp	TBD
Storage Temp	TBD
Power Supply Range	9 ~ 19 VDC
Power Consumption	TBD
Ingress Protection	TBD
Weight	TBD

APPLICATIONS

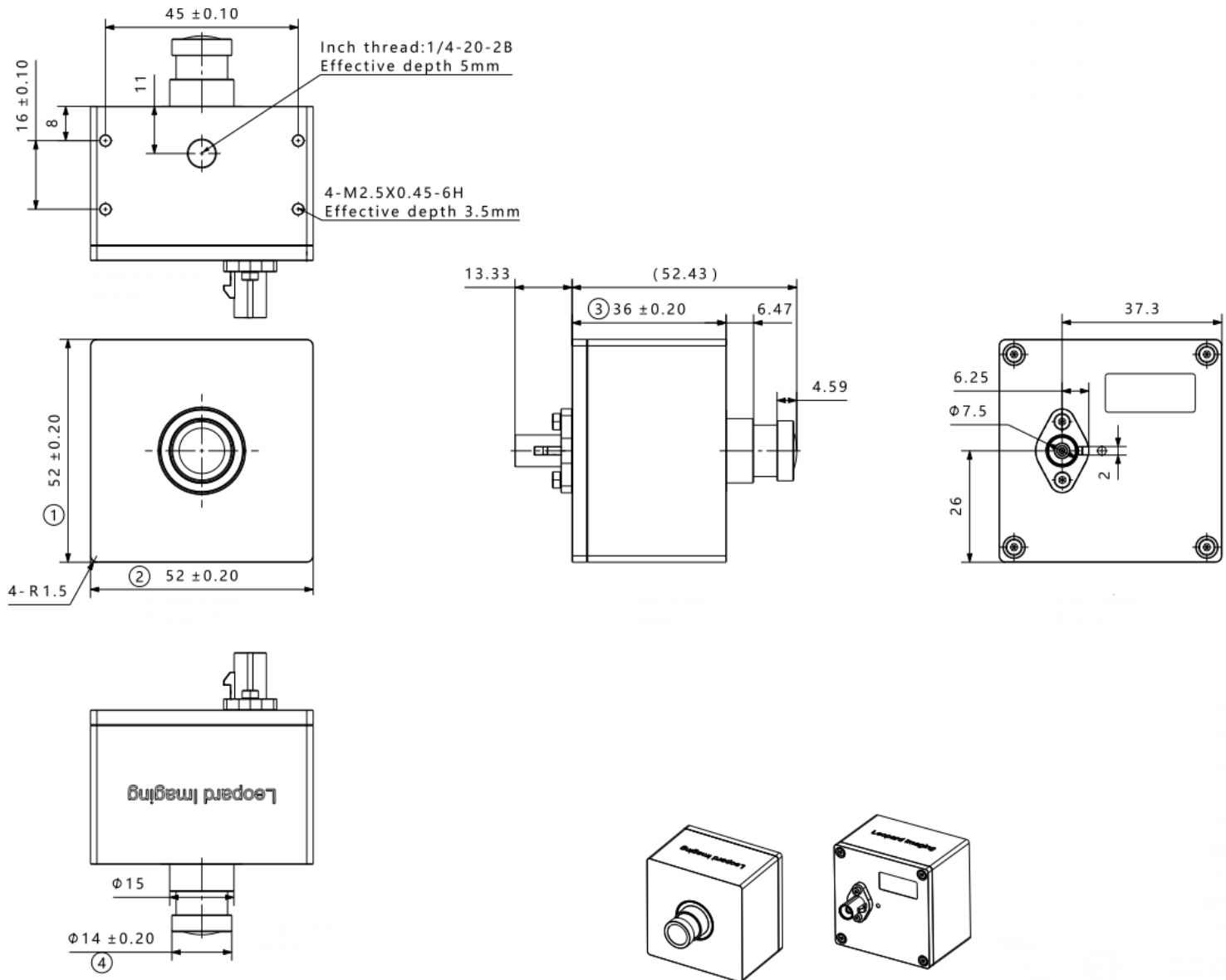
- Machine vision
- Logistics
- Industrial bar code scanning
- Robotics

LENS SPECIFICATIONS

Focal Length	3.8 mm
Aperture, F/#	2.6
Field of View (FOV)	90° horizontal
IR Filter	650nm IR cut filter
Lens Mount	M12 x P0.5



DIMENSIONS

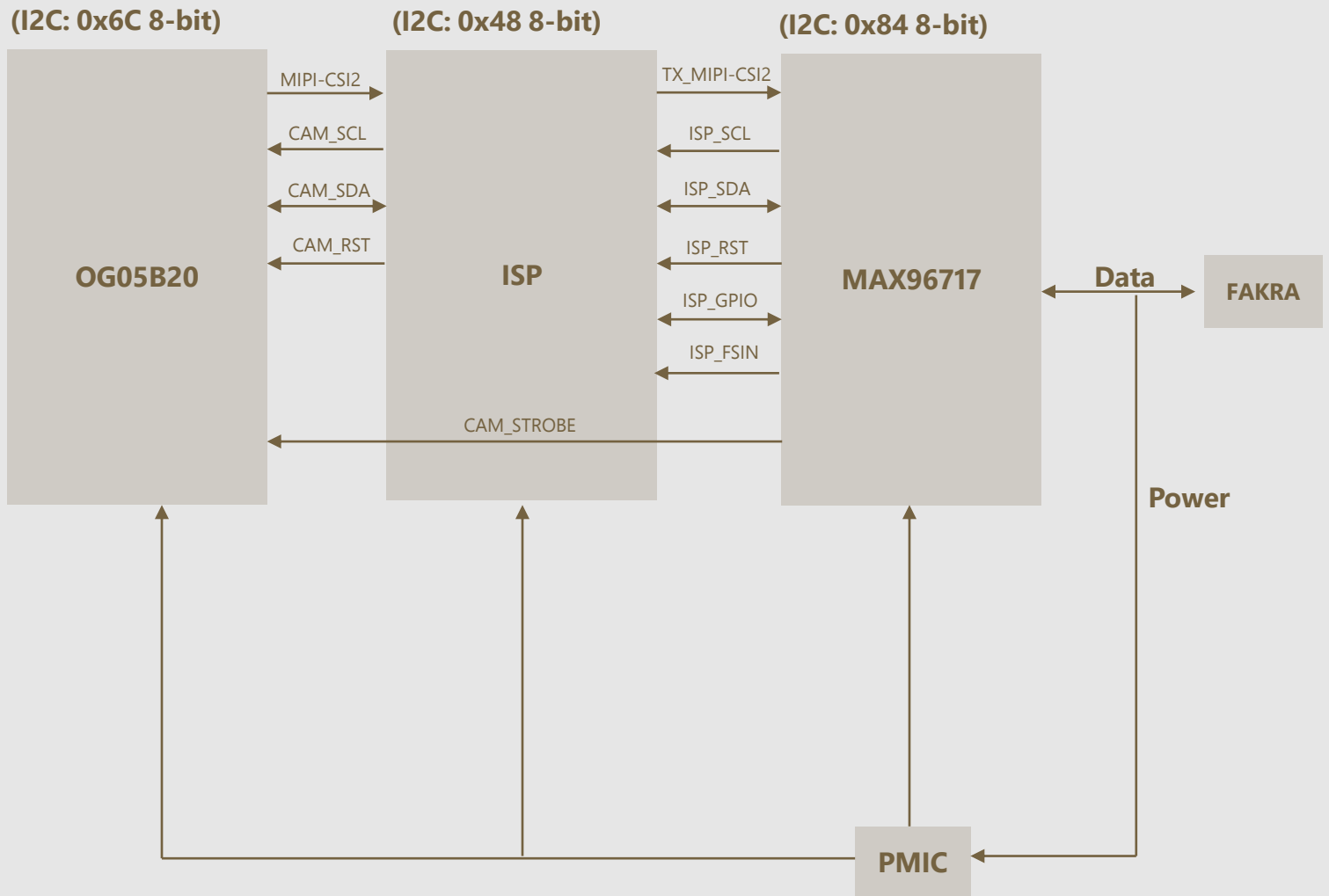


NOTE:

- ⊗ marked are important sizes.
- Tolerances for others unmarked refer to the tolerance table.
- Unit: mm

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				

SYSTEM BLOCK DIAGRAM

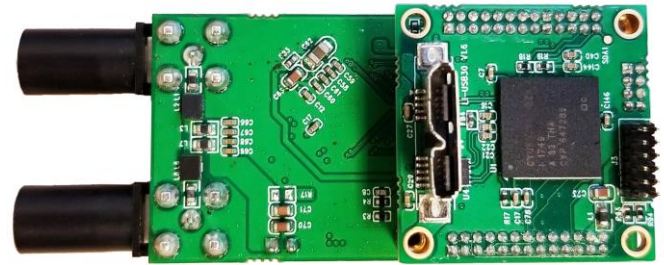


USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



Bottom View

LI-OG05B20-YUV-GM2B-090H can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-OG05B20-YUV-GM2B-090H**

SPECIFICATIONS

- USB 3.0 Super Speed support
- RAW data output without compression
- UVC compliant
- Allows customization
- 12 VDC power supply for camera
- Weight: TBD
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: TBD
- Power consumption: TBD
- Compatible with Windows, Linux OS and other OS which have UVC drivers

BOM

#	Items	QTY
1	LI-OG05B20-YUV-GM2B-090H	1
2	LI-GMSL2-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
- Save file as BMP & RAW format

● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	07 Nov 2025

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