



**LEOPARD**  
IMAGING

LI-OX05B1S-OAX40-VCL-OMS-GM2B-200H



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## INTRODUCTION

The LI-OX05B1S-OAX40-VCL-OMS-GM2B-200H is equipped with OmniVision 1/2.5" RGB-IR CMOS 5MP global shutter image sensor OX05B1S, automotive ISP OAX4000, Maxim GMSL2 serializer MAX96717 and 2 VCSELs. This camera outputs YUV data.

## SPECIFICATIONS

Sensor	OmniVision 1/2.5" RGB-IR CMOS 5MP Image Sensor OX05B1S
Optical Format	1/2.5"
Resolution	2592 (H) x 1944 (V) (Based on ISP binary)
Pixel Size	2.2 x 2.2 $\mu\text{m}$
Output Format	YUV422 (8-bit)
Color / Mono	RGB-IR
Frame Rate	25 fps @ 2592 x 1944
Shutter	Global shutter
Serializer	Maxim MAX96717
Power Supply Range	12V~16V <b>Note:</b> For higher voltage application, please contact with Leopard Sales.
ISP	OMNIVISION automotive ISP OAX4000
VCSEL	Included
IP Rating	TBD
FAKRA Connector	FAKRA Z TYPE
Power Consumption	114 mA @ 12 VDC (2 VCSELs off) 523 mA @ 12 VDC (2 VCSELs on) (2592 x 1944 @ 25 fps)
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	~ 222 g
Part#	LI-OX05B1S-OAX40-VCL-OMS-GM2B-200H



## APPLICATIONS

- Autonomous Driving
- Driver Monitoring System
- Occupant Monitoring System
- In-Cabin Monitoring System

## LENS SPECIFICATIONS

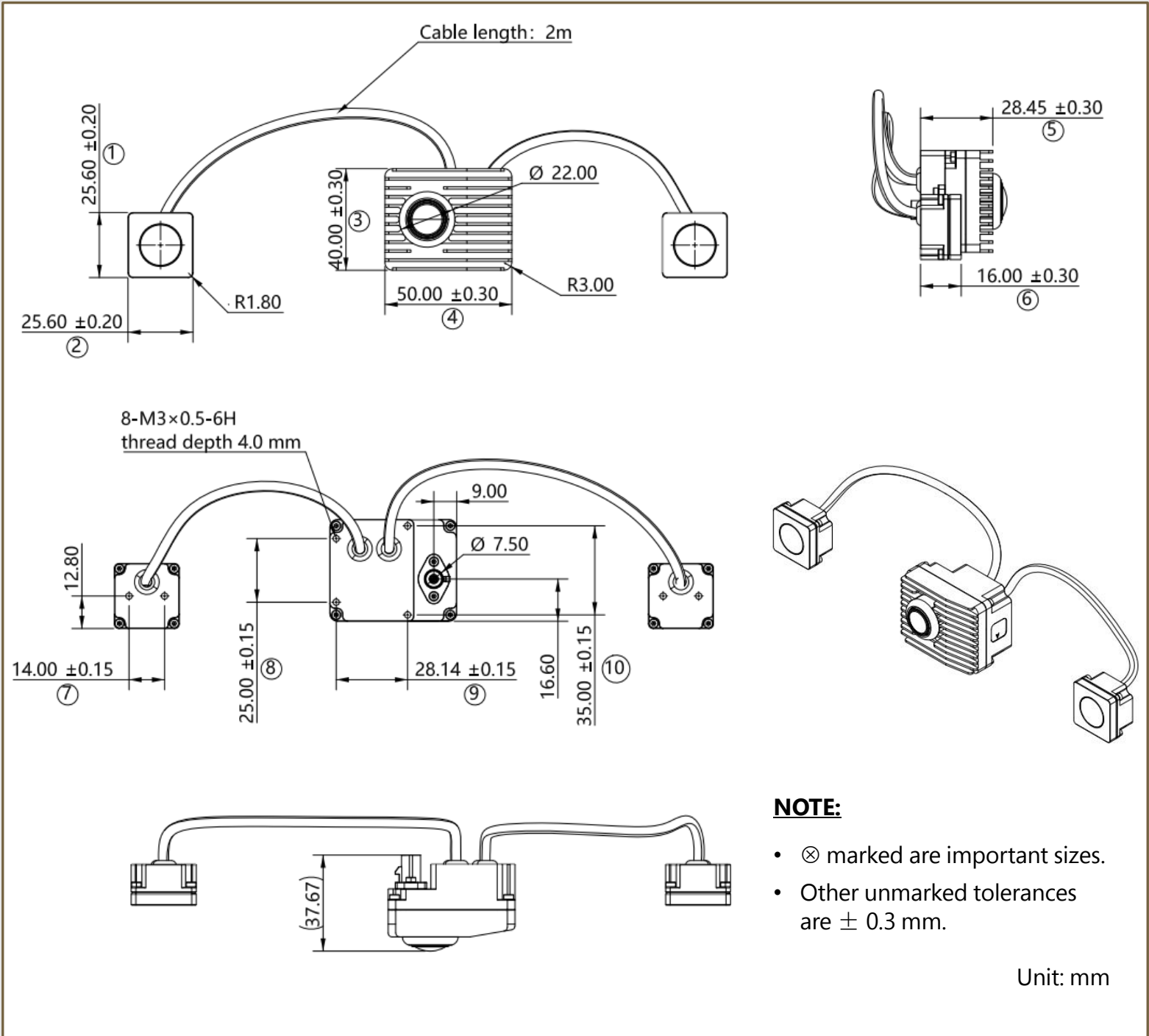
Focal Length	1.44 mm
Aperture, F/#	2.0 $\pm$ 5%
Field of View (FOV)	200° horizontal
IR Filter	Visible + 940 nm band pass filter
Relative Illumination	40.0% @ IH 2.4
Distortion ( $y=f\theta$ )	+10% @ IH 2.77
Lens Mount	M12 x P0.5

## VCSEL SPECIFICATIONS

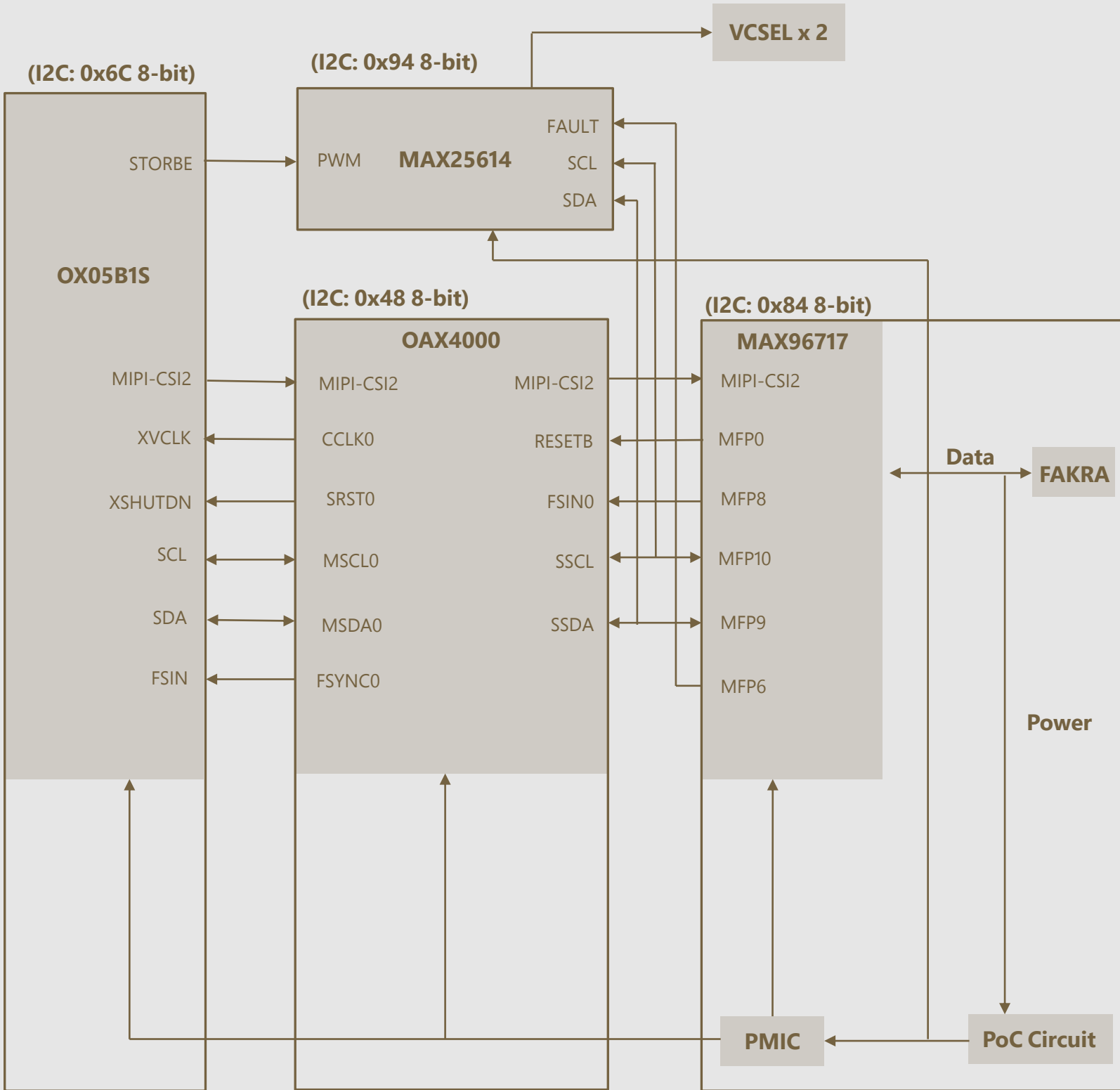
Wavelength	940 nm
Field of Illumination (FOI)	125.5° horizontal 111.5° vertical
QTY on Camera	2



# DIMENSIONS



# SYSTEM BLOCK DIAGRAM



## REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	16 May 2023
0.2	Update Power Supply Range, Operating Temp, Storage Temp and SYSTEM BLOCK DIAGRAM.	24 Jan 2024

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