



LEOPARD
IMAGING

LI-OX12A10-GM2B-XXXH



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INTRODUCTION

The LI-OX12A10-GM2B-XXXH is equipped with OmniVision 1/1.43" CMOS color sensor OX12A10 which supports for LED flicker mitigation (LFM) using LOFIC. Its serializer is Maxim GMSL2 serializer MAX96717. This camera outputs 12-bit / 14-bit / 16-bit / 20-bit and 24-bit RAW data.

SPECIFICATIONS

Sensor	OmniVision high-definition high dynamic range sensor OX12A10
Optical Format	1/1.43"
Resolution	4624 (H) x 2600 (V) (active pixels)
Pixel Size	2.1 x 2.1 μ m
Output Format	12-bit / 14-bit / 16-bit / 20-bit / 24-bit RAW
Color / Mono	Color sensor
Maximum Frame Rate	30 fps @ 4624 x 2600
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Lens	FOV H 28° / 120°
Serializer	Maxim MAX96717
IP Rating	TBD
Power Supply Range	8 ~ 17 VDC
Connector	FAKRA Z TYPE
Power Consumption	92 mA @ 12 VDC (4624 x 2604 @ 10 fps)
Operating Temp	-40°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	~ 60 g
Part#	LI-OX12A10-GM2B-XXXH

APPLICATIONS

- Automotive
 - ◆ Machine vision
 - ◆ High resolution front viewing
 - ◆ Autonomous Driving
 - ◆ Digital video recording

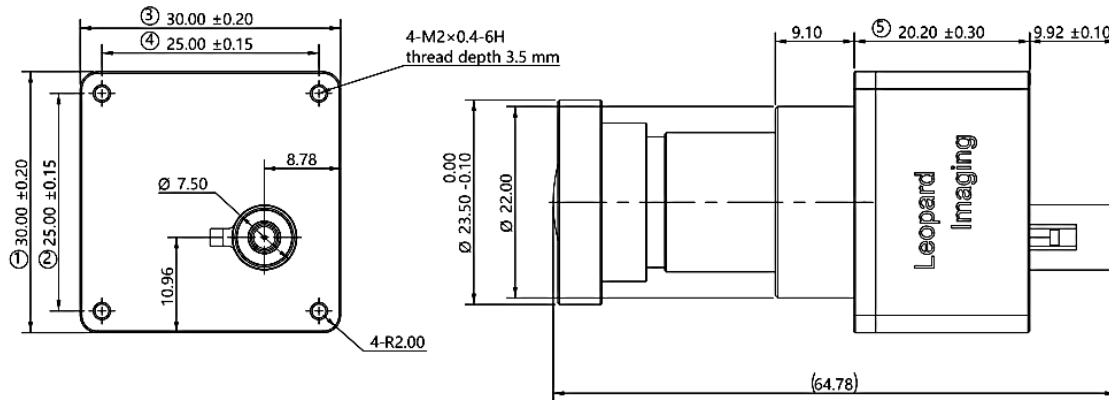


LI-OX12A10-GM2B-028H



LI-OX12A10-GM2B-120H

DIMENSIONS: LI-OX12A10-GM2B-028H

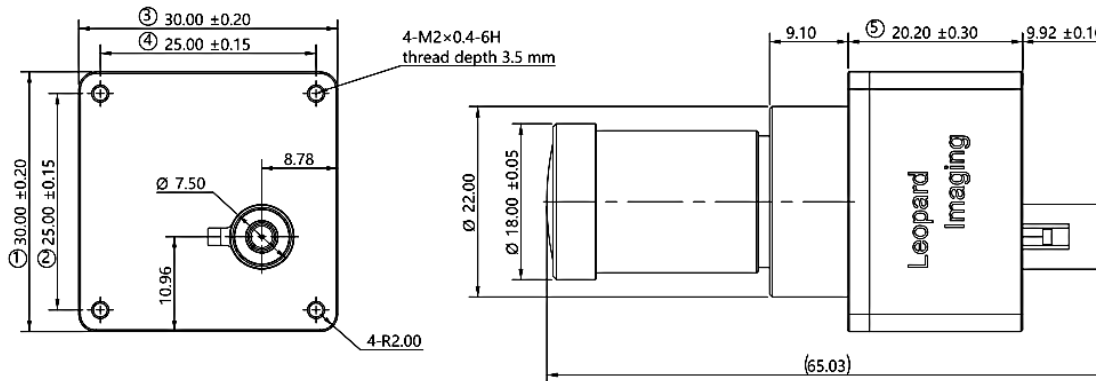


NOTE:

- ⊗ marked are important sizes.
- Tolerances for others unmarked refer to tolerance table.
- All materials are compliant with RoHS requirements.
- Unit: mm

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	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

DIMENSIONS: LI-OX12A10-GM2B-120H



NOTE:

- ⊗ marked are important sizes.
- Tolerances for others unmarked refer to tolerance table.
- All materials are compliant with RoHS requirements.
- Unit: mm

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	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

• IMAGE ORIENTATION



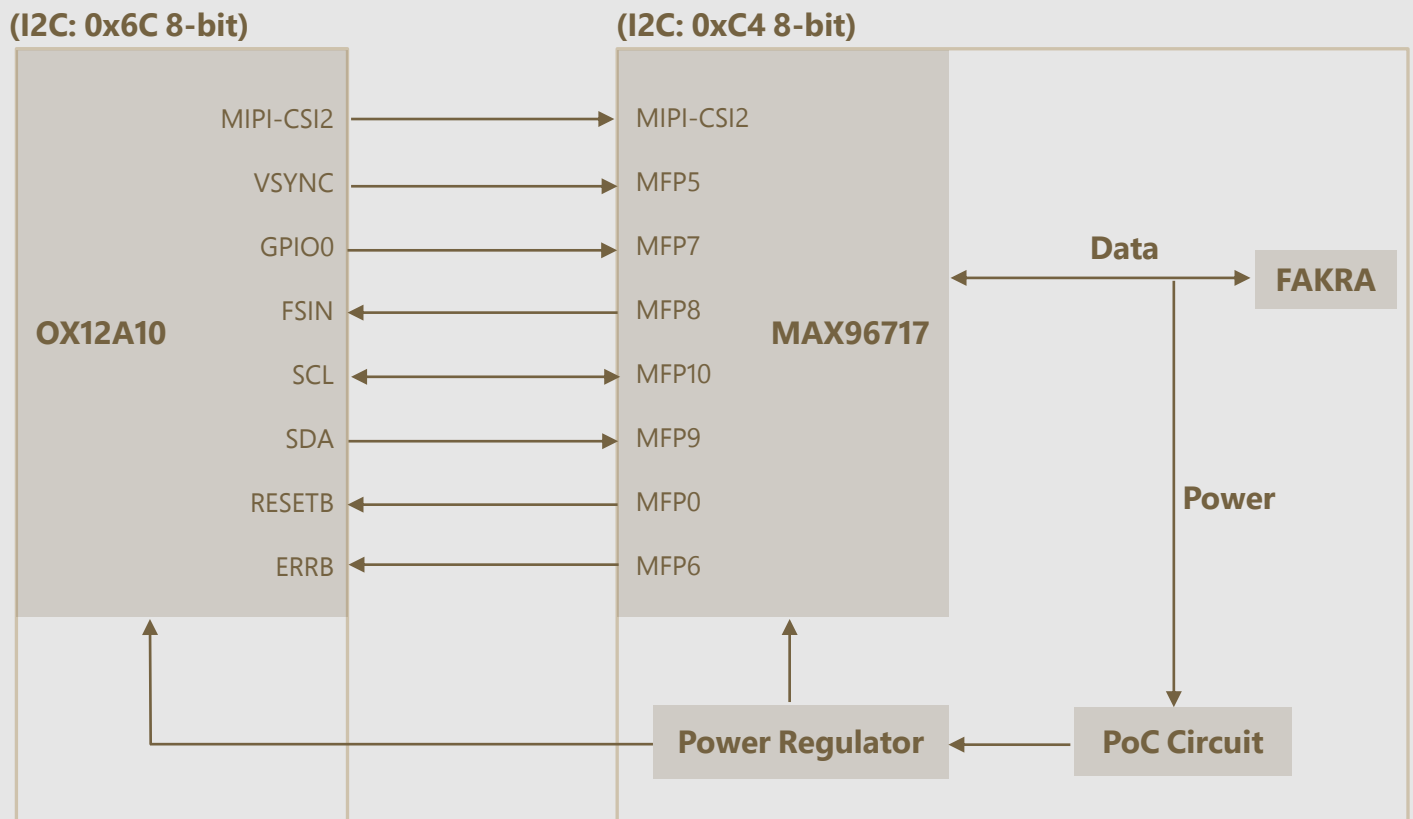
• ORDERING INFORMATION

NOTE:

xxxH refers to 028H (FOV H 028°) and 120H (FOV H 120°).

LI-OX12A10-GM2B-028H	LI-OX12A10-GM2B-120H
	
Lens EFL: 19.84 mm	Lens EFL: 5.17 ± 5% mm
Aperture, F/#: 2.0	Aperture, F/#: 1.6 ± 5%
Field of View (FOV): 28° horizontal	Field of View (FOV): 120° horizontal
Distortion(F-tan(θ)): -1.68% at 10.3mm image circle	Distortion: N/A
IR Filter: 650 nm IR cut filter	IR Filter: 650 nm IR cut filter
Mount: M16	Mount: M16

● SYSTEM BLOCK DIAGRAM



• REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	10 Sep 2024
0.2	1. Changed the PN from "LI-OX12A10-GM2B-028H" to "LI-OX12A10-GM2B-xxxH". 2. Added 120H camera info.	16 Oct 2024

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