



LEOPARD
IMAGING

LI-OG09A10-GM2B-138H



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-OG09A10-GM2B-138H is a 4k global shutter HDR camera optimized for the high-end security and consumer market. It incorporates the OmniVision OG09A10, a 1-inch CMOS color image sensor featuring PureCel®Plus-S, Global Shutter, and Nyxel® technologies, paired with FPAG and ADI MAX96717G GMSL2 serializer. It delivers 12-bit, 60 fps video with 90 dB HDR, making it ideal for the FA and ITS applications.

SPECIFICATIONS

Maximum Frame Rate	12-bit: 60 fps @ full size 12-bit: 30 fps @ DCG HDR Mode
Output Format	10-bit / 12-bit RAW data
HDR (High Dynamic Range)	Supported
Sensor	OmniVision OG09A10 4K CMOS Sensor
Optical Format	1-inch
Pixel Size	3.45 μm x 3.45 μm
Color / Mono	Color
Resolution	4096 (H) x 2160 (V) (active pixels)
FPGA	Included
Serializer	ADI GMSL2 MAX96717G
Connector	FAKRA Z TYPE
Power Supply Range	9 ~ 19 VDC
Power Consumption	93 mA @ 12 VDC (10 fps @ 4096 \times 2159)
Operating Temp	0°C ~ +70°C
Storage Temp	-30°C ~ +85°C
IP Rating	N/A
Weight	~ 64 g

APPLICATIONS

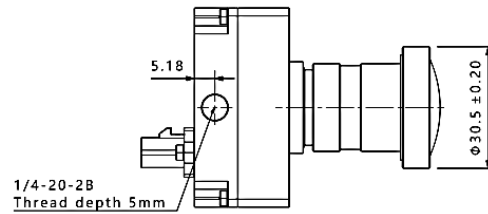
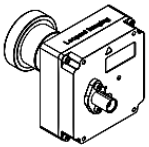
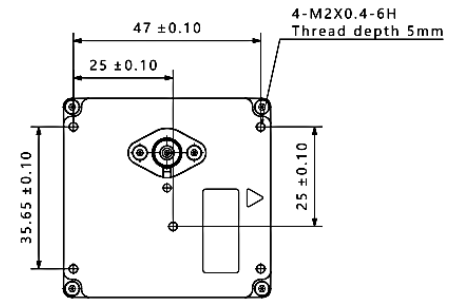
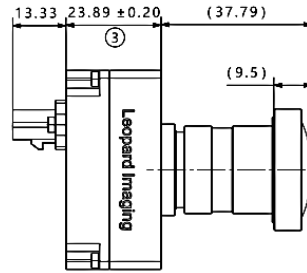
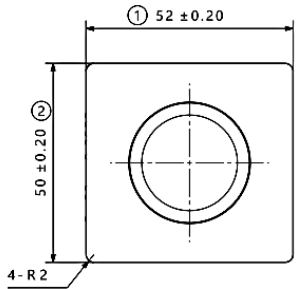
- Intelligent transportation systems (ITS)
- Factory automation (FA)
- Machine vision camera
- Industrial bar code scanning
- Robotics

LENS SPECIFICATIONS

Focal Length	5.9 mm
Aperture, F/#	2.9
Field of View (FOV)	138° horizontal
IR Filter	650 nm IR cut Filter
Lens Mount	M20 x P0.5



DIMENSIONS

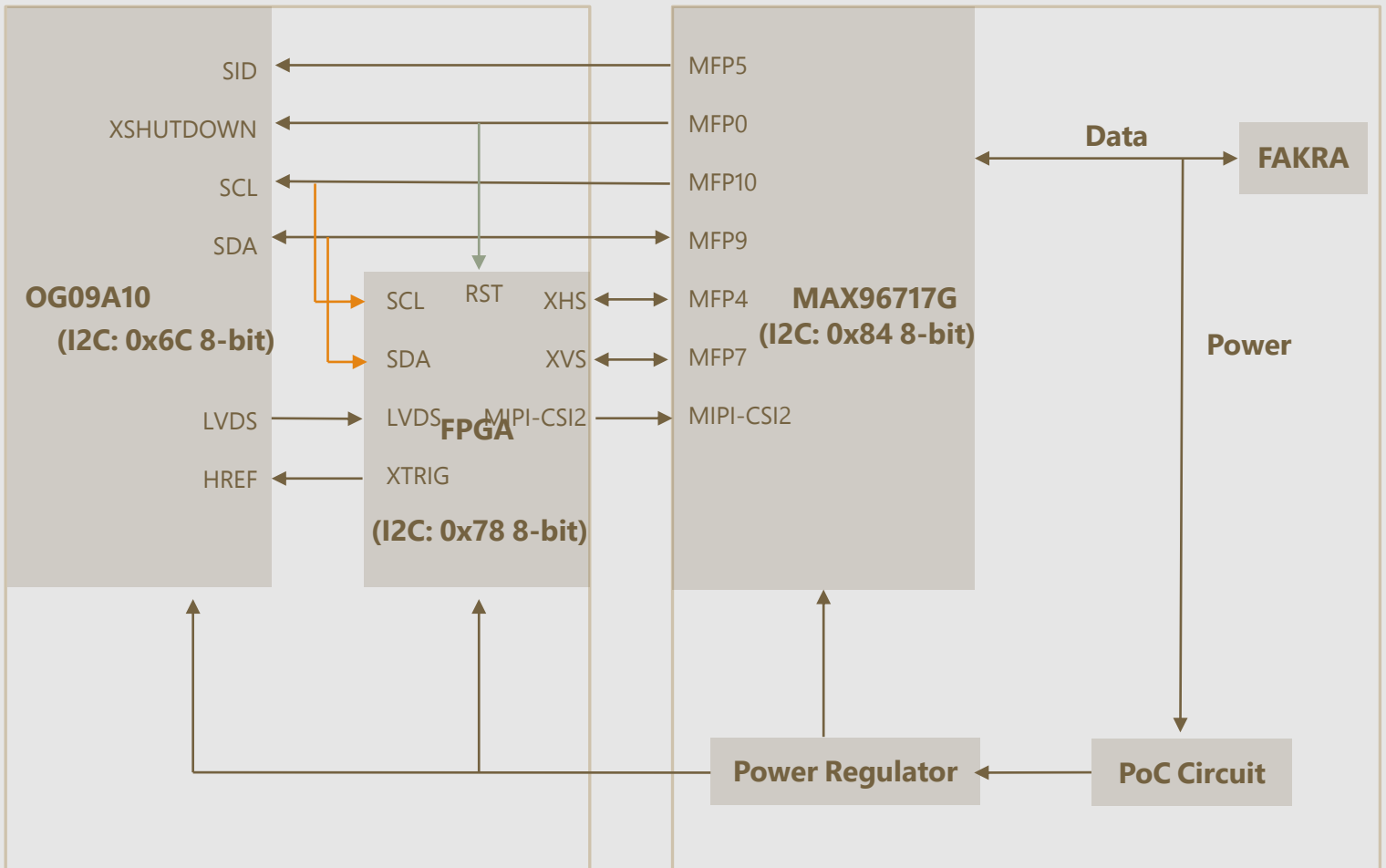


NOTE:

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

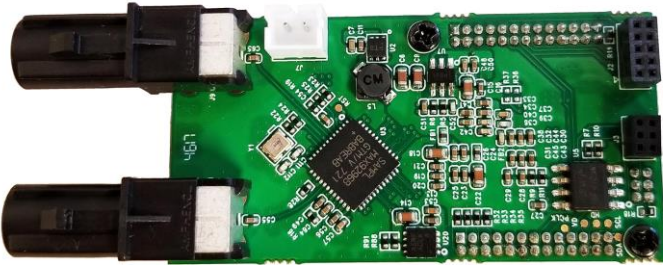
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X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

SYSTEM BLOCK DIAGRAM

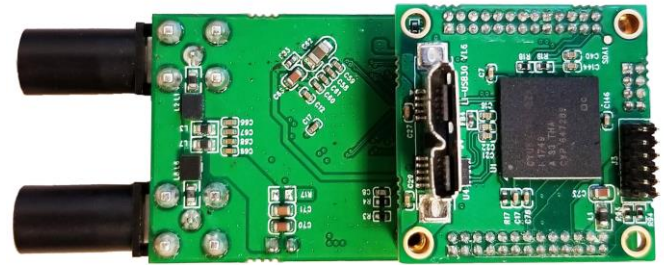


USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



Bottom View

LI-OG09A10-GM2B-138H can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-OG09A10-GM2B-138H**

SPECIFICATIONS

- USB 3.0 Super Speed support
- UVC compliant
- Allows customization
- 12 VDC Power Supply for camera
- Weight: ~ 230 g
- Single Coax Cable transmits up to 12 meters PoC (Power over Cable)
- Resolution: 10 fps @ 4096 × 2159
- Power consumption (camera): 93 mA @ 12 VDC
- Compatible with Windows, Linux OS and other OS which have UVC drivers

BOM

#	Items	QTY
1	LI-OG09A10-GM2B-138H	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

REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	19 May 2026

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