



LEOPARD
IMAGING

LI-AR0544-GM2B-108H



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-AR0544-GM2B-108H is equipped with ON Semiconductor 5MP CMOS image sensor AR0544 which features ONSEMI's breakthrough low-noise CMOS imaging technology and ADI GMSL2 serializer MAX96717G. This camera outputs 2592 x 1944 RAW data.

SPECIFICATIONS

Maximum Frame Rate	60 fps @ Full Size, Linear Mode
Output Format	10-bit / 12-bit RAW data
Sensor	ON Semiconductor AR0544 5MP CMOS Sensor
Optical Format	1/4.2-inch 5 MP (4:3)
Pixel Size	1.4 μ m Back Side Illuminated (BSI)
Color / Mono	Color
Resolution	2592 (H) x 1944 (V) (active pixels)
HDR (High Dynamic Range)	Supported
LFM (LED Flicker Mitigation)	Supported
Temperature Sensor	On-chip Temperature Sensor
Serializer	ADI GMSL2 MAX96717G
Connector	FAKRA Z TYPE
Power Supply Range	9 ~ 19 VDC
Power Consumption	TBD
Operating Temp	TBD
Storage Temp	TBD
IP Rating	TBD
Weight	TBD

APPLICATIONS

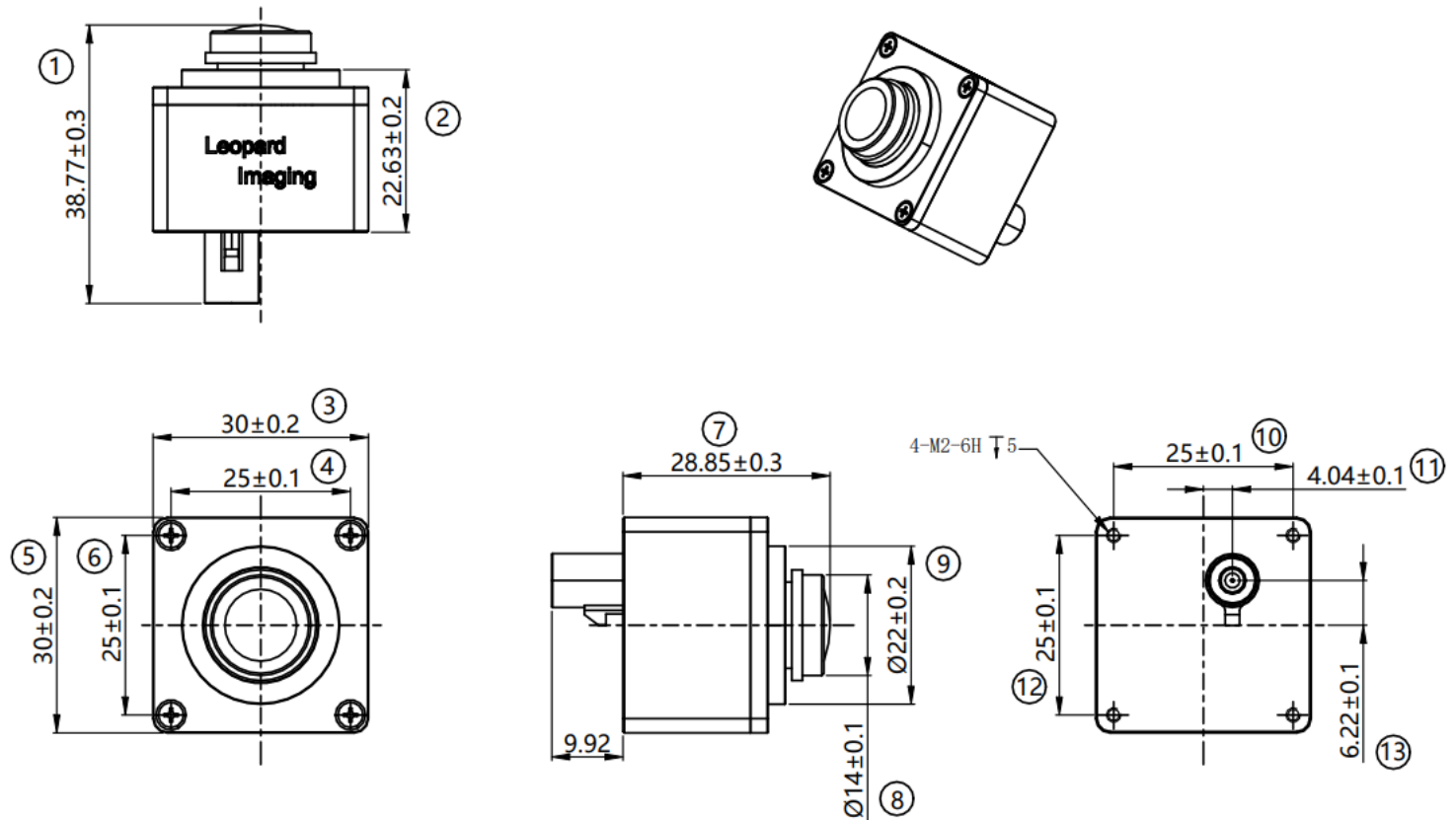
- Videoconferencing Endpoint
- Webcam
- Machine Vision Camera
- Video Doorbell
- Retail In-store Camera, Bodycam, etc.
- 3D and Stereo Camera

LENS SPECIFICATIONS

Focal Length	1.93 mm
Aperture, F/#	2.2 $\pm$ 5%
Field of View (FOV)	108° horizontal
F-Theta Distortion	< -11.6% @ 5.6m
Relative Illumination	40% (design)
IR Filter	650 nm IR cut Filter
Lens Mount	M12 x P0.5



DIMENSIONS

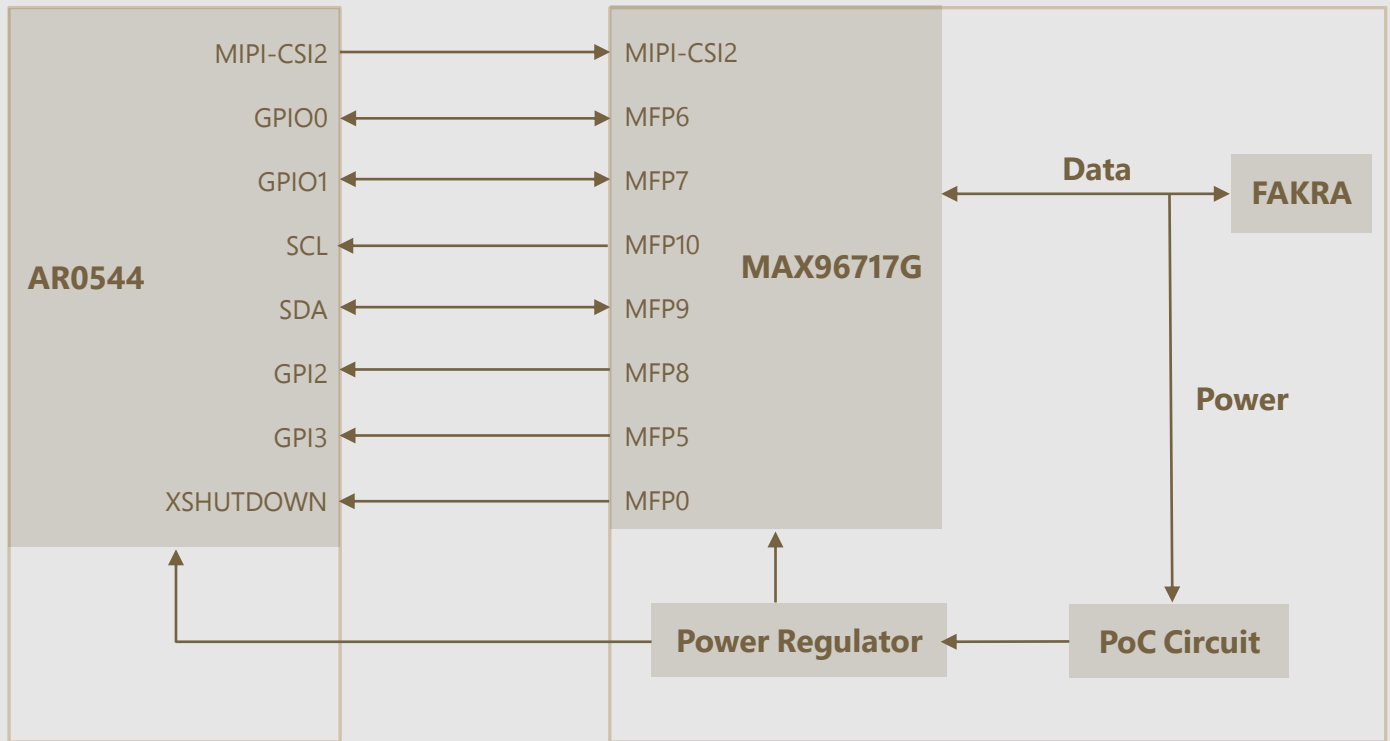


NOTE:

- ⊗ 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
$0.5 < X \leq 3$	± 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

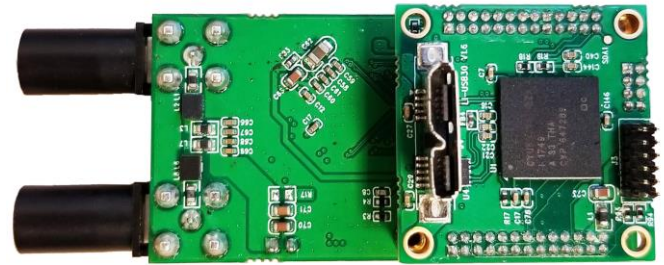


USB3.0 CAMERA KIT

LI-GMSL2-USB



Top View



Bottom View

LI-AR0544-GM2B-108H can connect to LI-GMSL2-USB as a USB 3.0 camera.

Part#: **LI-USB30-AR0544-GM2B-108H**

SPECIFICATIONS

- USB 3.0 Super Speed support
- 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-AR0544-GM2B-108H	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
0.1	Initial draft.	30 Oct 2023
0.2	Added dimensions and 3D pictures.	25 Sep 2025
0.3	1. Updated pictures on the page 1 & 2. 2. Added USB3.0 camera kit.	28 Nov 2025

910 Auburn Ct, Fremont, CA 94538, USA

Phone: +1-408-263-0988

Fax: +1-408-217-1960

Email: sales@leopardimaging.com

Website: www.leopardimaging.com

