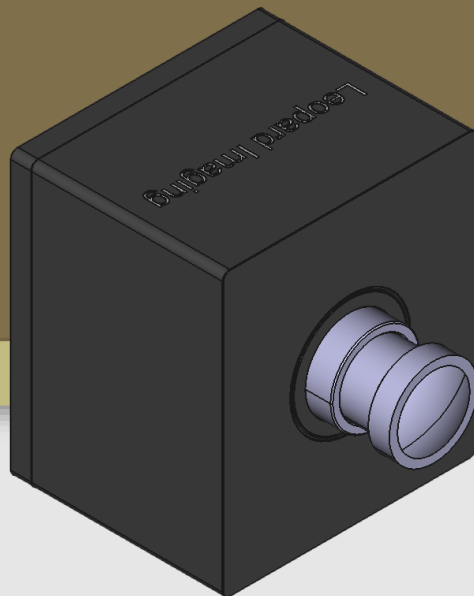




LEOPARD
IMAGING

LI-USB30-AR0246-YUV-088H



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-USB30-AR0246-YUV-088H is a Hyperlux LH camera with ON Semiconductor 1/4-Inch 2Mp CMOS digital image RGB-NIR sensor AR0246, ISP and USB3.0 Controller. 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.

SPECIFICATIONS

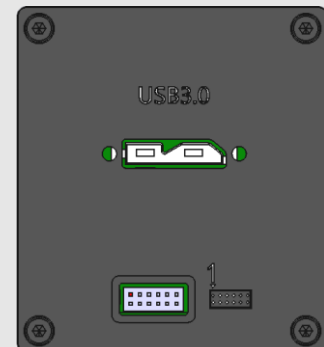
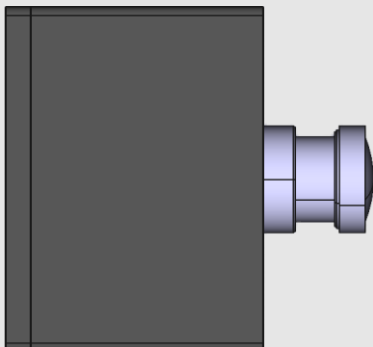
Frame Rate	TBD
Output Format	YUV 422
Sensor	ON Semiconductor 1/4-Inch 2Mp CMOS digital image sensor AR0246
Optical Format	1/4"
Color / Mono	RGB-NIR
Pixel Size	2.0 μm x 2.0 μm , BSI
Resolution	1920 (H) x 1080 (V) (active pixels)
xDR (X-tended Dynamic Range)	Supported
ISP	Included
USB30 Controller	Included
Interface	USB 3.0
Power Supply Range	5 VDC (from USB3.0 port)
Power Consumption	TBD
Operating Temp	TBD
Storage Temp	TBD
Ingress Protection	TBD
Weight	TBD

APPLICATIONS

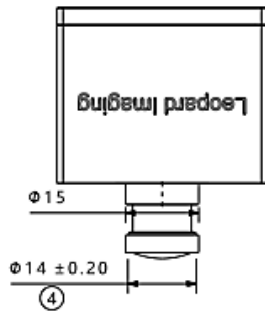
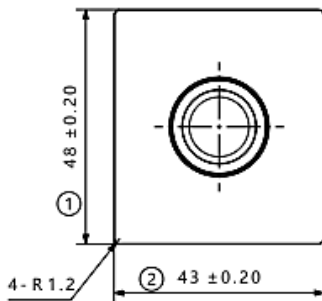
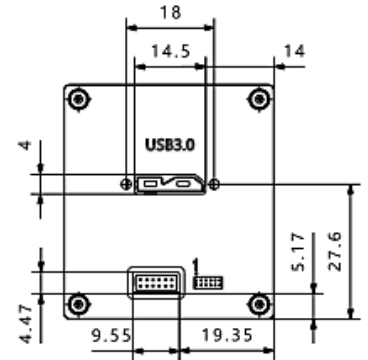
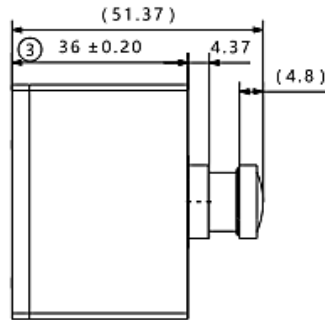
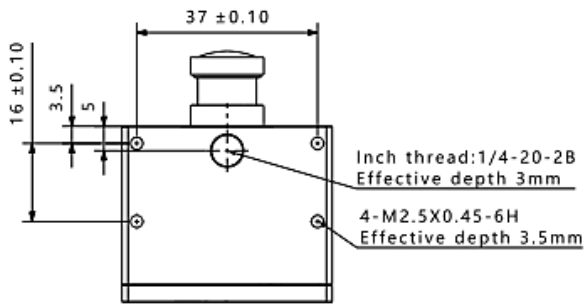
- IoT
- Security
- Robots

LENS SPECIFICATIONS

Effective Focal Length	2.5 mm
Aperture, F/#	2.0
Field of View (FOV)	48.8° vertical
	88.9° horizontal
	102.8° diagonal
TV Distortion	-9.7%
Relative Illumination	94.1%
IR Filter	650nm IR cut filter
Lens Mount	M12 x P0.5



DIMENSIONS



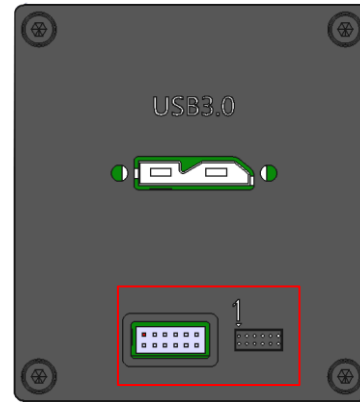
NOTE:

- ⊗ marked are important sizes.
- Tolerances for the unmarked refer to the 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				

● INTERFACE

- Part#: PZ3161212PDGFCNN070
- Number of Positions: 12
- Pitch: 1.27mm



PINOUT DETAILS

Pin No	Pin Name	Description	Pin Type	Voltage Level
1	OPT_IN	Isolated Input of optoisolator	Input	Max 30V
2	NC	No connection	-	-
3	UART_TX	Transmitting end of UART of CYUSB3014	Output	3.3V
4	UART_RX	Receiving end of UART of CYUSB3014	Input	3.3V
5	GND	Field Ground of optoisolator	-	-
6	GND	Digital Ground	-	-
7	5V0	5V power	Power	5V
8	3V3	3.3V power	Power	3.3V
9	GPIO25	General-purpose input/output	Bidir	3.3V
10	GPIO60	General-purpose input/output	Bidir	3.3V
11	GPIO26	General-purpose input/output	Bidir	3.3V
12	GPIO27	General-purpose input/output	Bidir	3.3V

- REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	11 Nov 2025

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Email: sales@leopardimaging.com
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