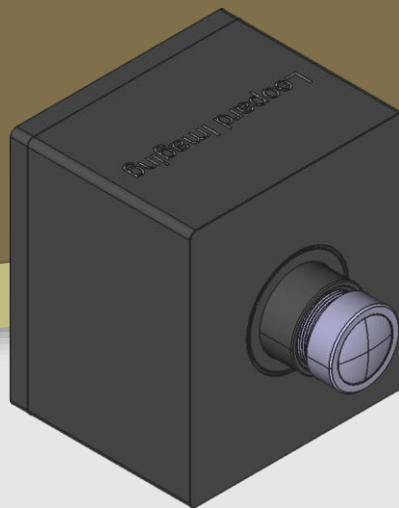




LEOPARD
IMAGING

LI-USB30-AR0234-YUV-120H



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-AR0234-YUV-120H is a Full HD color global shutter USB 3.0 camera. It is equipped with ON Semiconductor 2.3MP CMOS global shutter digital image RGB sensor AR0234CS, ISP and USB30 controller. This global shutter camera captures images at a high frame rate, which helps to minimize frame-to-frame distortion and reduce motion blur while capturing fast-moving objects to produce smoother images with greater scene details.

SPECIFICATIONS

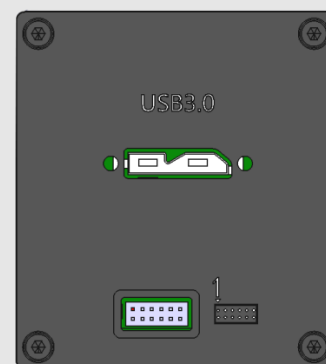
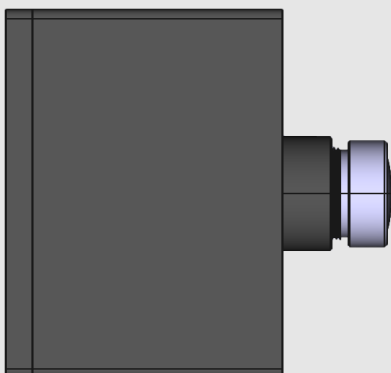
Frame Rate	30 fps @ 1920 x 1200
Output Format	YUV422
Sensor	ON Semiconductor 2.3MP CMOS Image Sensor AR0234CS
Optical Format	1/2.6"
Pixel Size	3.0 x 3.0 μm
Color / Mono	color
Shutter	Global shutter
Resolution	1920 (H) x 1200 (V) (based on ISP binary)
ISP	Included
USB30 Controller	Included
Interface	USB 3.0
Power Supply Range	5 VDC (from USB3.0 port)
Power Consumption	312 mA @ 5 VDC (30 fps @ 1920 x 1200)
Operating Temp	TBD
Storage Temp	TBD
IP Rating	TBD
Weight	TBD

Applications

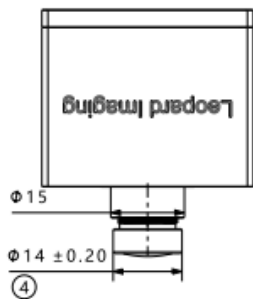
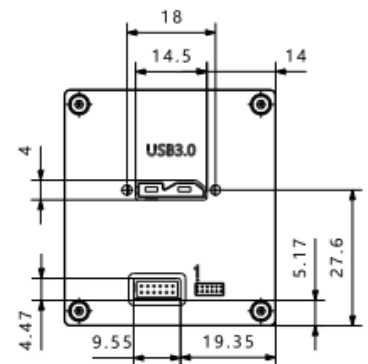
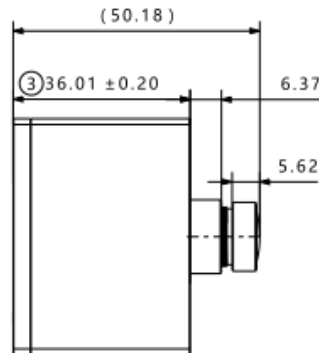
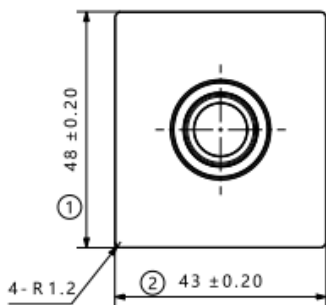
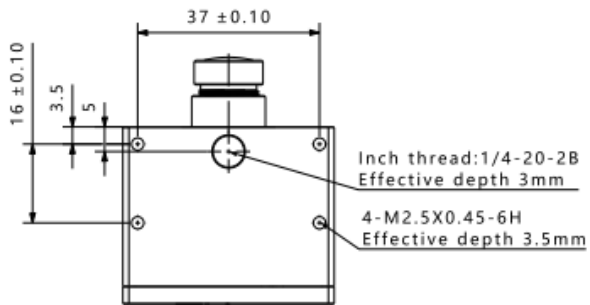
- Bar Code Scanner
- 3D Scanning
- Positional Tracking
- Iris Scanning
- Machine Vision
- Augmented Reality
- Virtual Reality
- Biometrics
- Gesture Recognition

Lens Specifications

Effective Focal Length	2.8 mm
Aperture, F/#	2.1
Field of View (FOV)	120° horizontal
OP Distortion	< -63%
Relative Illumination	> 40%
IR Filter	650 nm IR CUT Filter
Lens Mount	M12 x P0.5



DIMENSIONS



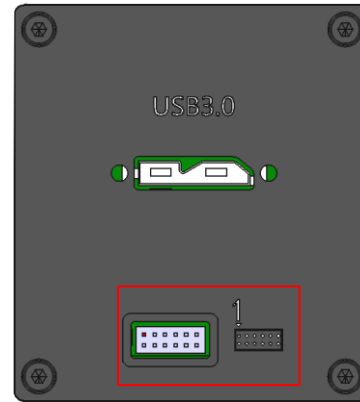
NOTE:

- ⊗ 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 optoiso	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 optoiso	-	-
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.	04 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

