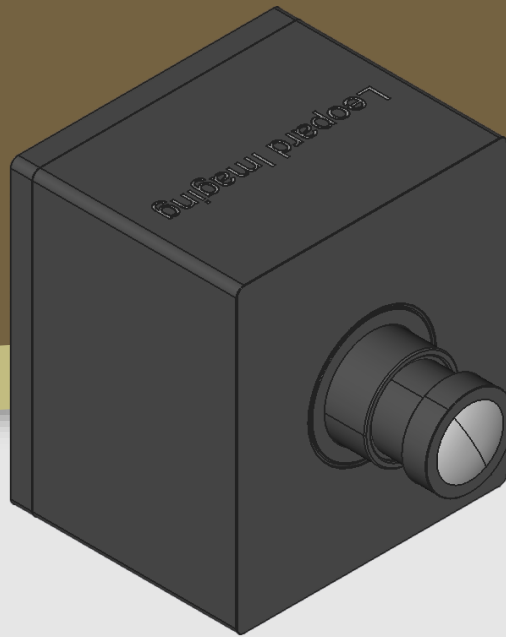




LEOPARD
IMAGING

LI-USB30-AR0830C-YUV-085H



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INTRODUCTION

The LI-USB30-AR0830C-YUV-085H is a MIPI D-PHY USB30 camera. It's equipped with ON Semiconductor stacked 1/2.9-inch back side illuminated (BSI) 8 MP CMOS digital image color sensor AR0830, ON Semiconductor ISP and USB 3.0 controller. This camera outputs YUV data.

SPECIFICATIONS

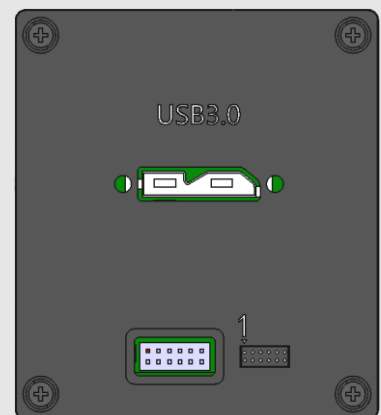
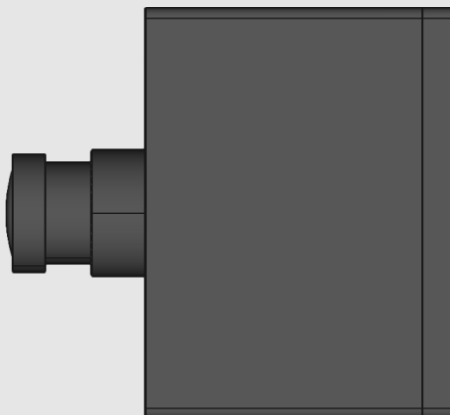
Video Resolution @ Frame Rate	1920 x 1080 @ 15fps
Sensor	ON Semiconductor 1/2.9-inch CMOS Image Sensor AR0830
Optical Format	1/2.9-inch 8 MP (16:9)
Resolution	3840 (H) x 2160 (V) (active pixels)
Pixel Size	1.4 μ m Back Side Illuminated (BSI)
Color / Mono	Color sensor
Shutter	Electronic Rolling Shutter (ERS) and Global Reset Release (GRR) Modes Supported
Output Format	YUV422
ISP	Included
Interface	USB 3.0 Micro B
Supply Voltage	5 VDC power source from USB3.0 port
Power Consumption	0.343 A @ 5 VDC (15 fps @ 1920 x 1080)
Operating Temp	TBD
Storage Temp	TBD
Weight	TBD

APPLICATIONS

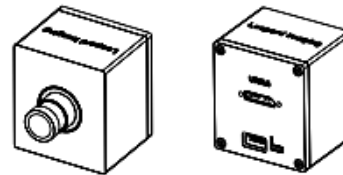
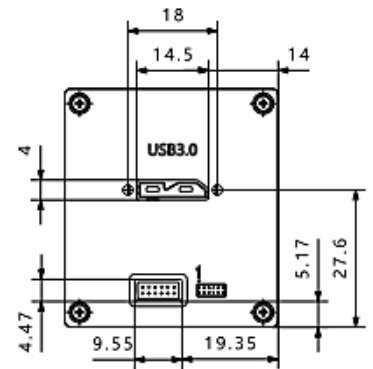
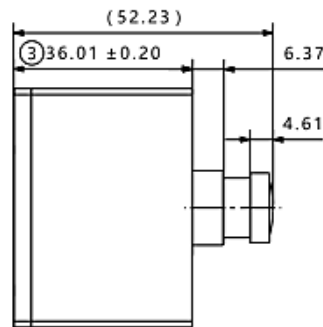
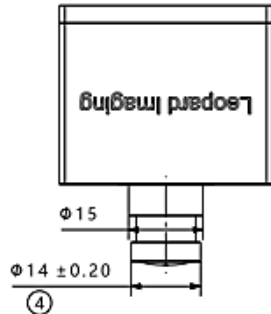
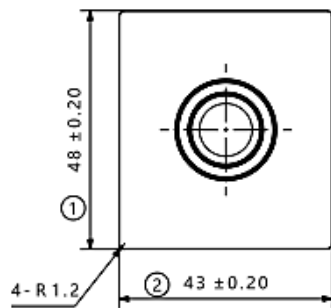
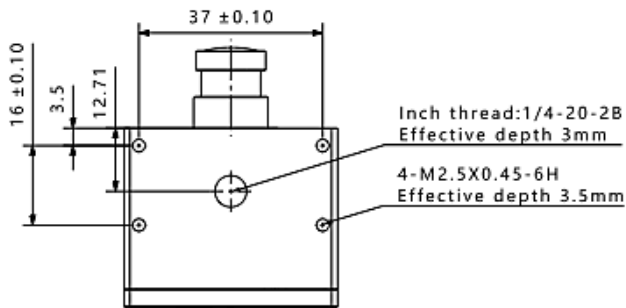
- Videoconferencing Endpoint
- Webcam
- Machine Vision Camera
- Video Doorbell
- Retail In-store Camera, Bodycam, etc.
- 3D and Stereo Camera

Lens Specifications

Effective Focal Length	3.8 mm
Aperture, F/#	2.6
Field of View (FOV)	85° horizontal
IR Filter	650 nm IR CUT Filter
Lens Mount	M12 x 0.5



DIMENSIONS



NOTE:

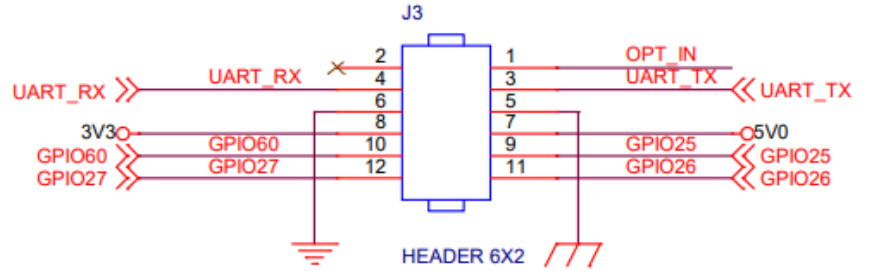
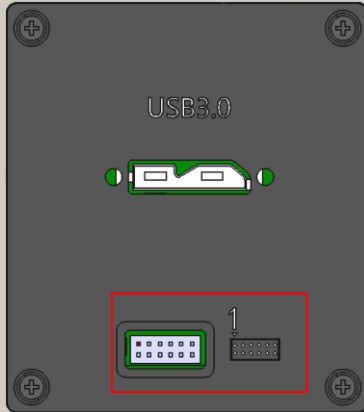
- ⊗ marked are important sizes.
- Other unmarked tolerances refer to the tolerance table.
- Unit: mm

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 OF J3

- 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.	15 Aug 2025

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