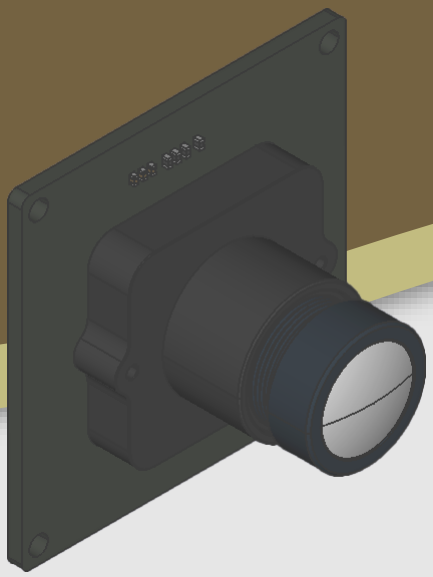
LEOPARD IMAGING

LI-IMX832-MIPI-118H



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-IMX832-MIPI-118H is a MIPI CSI-2 color camera with Sony STARVIS 2 diagonal 6.45 mm (Type 1/2.8) CMOS sensor IMX832. This camera outputs 10-bit / 12-bit RAW data.

SPECIFICATIONS

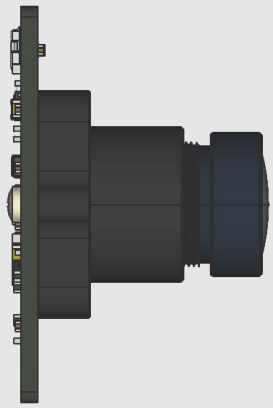
Maximum Frame Rate	12-bit: 60 fps @ all-pixel scan mode 10-bit: 90 fps @ all-pixel scan mode
Output Format	10-bit / 12-bit RAW data
Sensor	Sony STARVIS 2 Diagonal 6.45 mm CMOS Image Sensor IMX832
Optical Format	1/2.8"
Resolution	1920 (H) x 1080 (V)
Pixel Size	2.9 x 2.9 µm
Dynamic Range	Supports Digital Overlap (DOL) HDR and Clear HDR
Color / Mono	Color
Interface	4-lane MIPI CSI-2
Work Mode	Master
Power Consumption	TBD
Operating Temp	TBD
Storage Temp	TBD
Weight	TBD

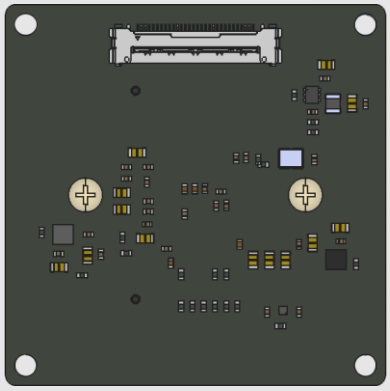
APPLICATIONS

- IoT
- Drone
- Robots

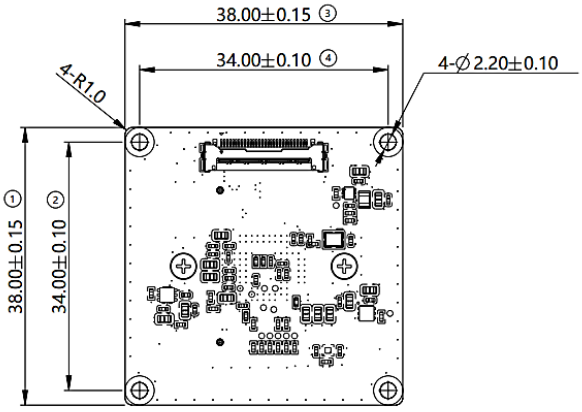
LENS SPECIFICATIONS

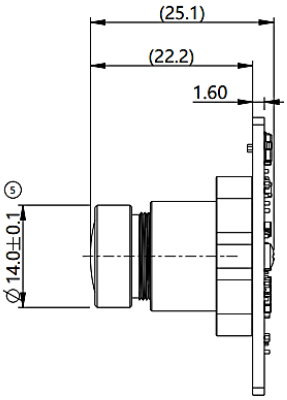
Effective Focal Length	2.8 mm
Aperture, F/#	2.1
Field of View (FOV)	118˚ horizontal
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5

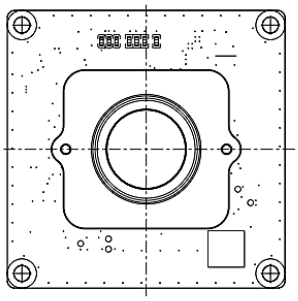




DIMENSIONS







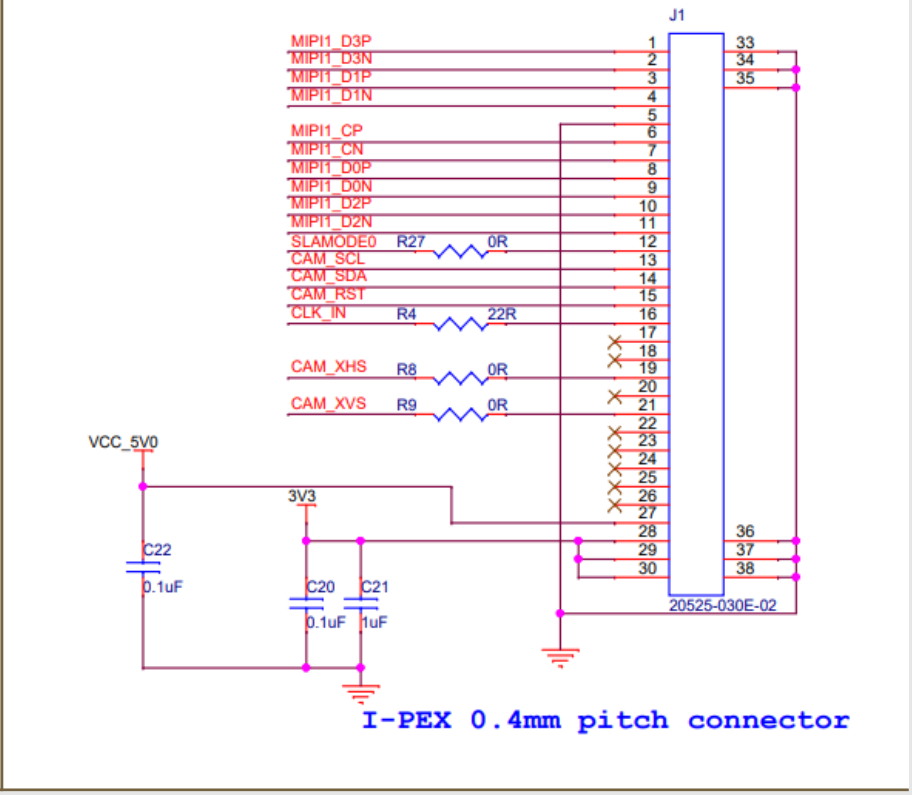
NOTE:

- ⊗ 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≤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				

MIPI INTERFACE

- Connector Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX cable: LI-FAW-1233
- Sensor I2C Address: 0x10 (7-bit)
- External Power Supply: 3.3V and 5.0V



Pinout details

Pin No	Signal Name	Pin Type	Description	Voltage Level
1	MIPI_D3P	OUTPUT	MIPI Data3 Differential Pair +	MIPI DPHY
2	MIPI_D3N	OUTPUT	MIPI Data3 Differential Pair -	MIPI DPHY
3	MIPI_D1P	OUTPUT	MIPI Data1 Differential Pair +	MIPI DPHY
4	MIPI_D1N	OUTPUT	MIPI Data1 Differential Pair -	MIPI DPHY
5	GND	-	-	-
6	MIPI_CP	OUTPUT	MIPI Clock Lane Differential Pair +	MIPI DPHY
7	MIPI_CN	OUTPUT	MIPI Clock Lane Differential Pair -	MIPI DPHY
8	MIPI_D0P	OUTPUT	MIPI Data0 Differential Pair +	MIPI DPHY
9	MIPI_D0N	OUTPUT	MIPI Data0 Differential Pair -	MIPI DPHY
10	MIPI_D2P	OUTPUT	MIPI Data2 Differential Pair +	MIPI DPHY
11	MIPI_D2N	OUTPUT	MIPI Data2 Differential Pair -	MIPI DPHY
12	SLAMODE0	INPUT	Master / Slave selection input (Reserved) Master mode in default	1.8V
13	CAM__SCL	INPUT	1.8V IO Camera I2C SCL signal (Pulled up to 1.8V with 1k)	1.8V

Pin No	Signal Name	Pin Type	Description	Voltage Level
14	CAM_SDA	I/O	1.8V IO Camera I2C SDA signal (Pulled up to 1.8V with 1k)	1.8V
15	CAM_RST	INPUT	1.8V IO camera reset signal (Pulled up to 1.8V with 10k)	1.8V
16	CLK_IN	INPUT	Reserved CLK for camera	1.8V
17	-	-	-	-
18	-	-	-	-
19	CAM_XHS	I/O	Reserved horizontal sync signal	1.8V
20	-	-	-	-
21	CAM_XVS	I/O	Reserved vertical sync signal	1.8V
22	-	-	-	-
23	-	-	-	-
24	-	-	-	-
25	-	-	-	-
26	-	-	-	-
27	5V0	POWER	5V power supply (Must be provided from the host side)	5V
28	3V3	POWER	3.3V power supply (Must be provided from the host side)	3.3V
29	3V3	POWER	3.3V power supply (Must be provided from the host side)	3.3V
30	3V3	POWER	3.3V power supply (Must be provided from the host side)	3.3V

REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	05 Nov 2026

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