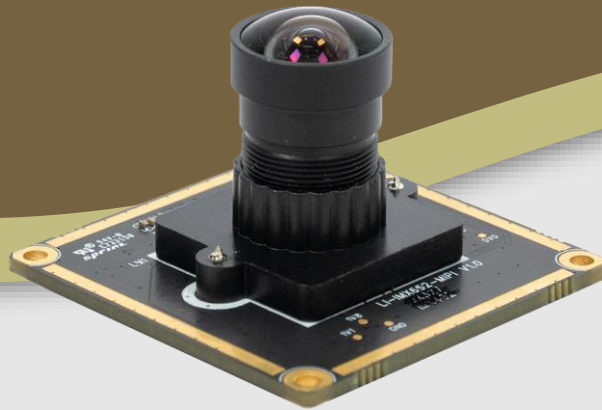




LEOPARD
IMAGING

LI-IMX662-MIPI-081H



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INTRODUCTION

The LI-IMX662-MIPI-081H is a MIPI CSI-2 camera with Sony STARVIS 2 diagonal 6.45 mm (Type 1/2.8) CMOS sensor IMX662. This camera outputs 10-bit / 12-bit RAW data.

SPECIFICATIONS

Sensor	Sony STARVIS 2 Diagonal 6.45 mm CMOS Image Sensor IMX662
Optical Format	1/2.8"
Resolution	1937 (H) x 1097 (V) (active pixels)
Pixel Size	2.9 x 2.9 μm
Output Format	10-bit / 12-bit RAW data
Maximum Frame Rate	12-bit: 60 fps @ all-pixel scan mode 10-bit: 90 fps @ all-pixel scan mode
ISP	Not included
Color / Mono	Color
Interface	4-lane MIPI CSI-2
Work Mode	Master
Power Consumption	212 mA @ 5 VDC (1936 x 1100 @ 30 fps)
Operating Temp	-30°C ~ +85°C
Storage Temp	-30°C ~ +85°C
Weight	~ 16 g
Size	38.0 (L) x 38.0 (W) x 30.0 (D) mm
Part#	LI-IMX662-MIPI-081H

APPLICATIONS

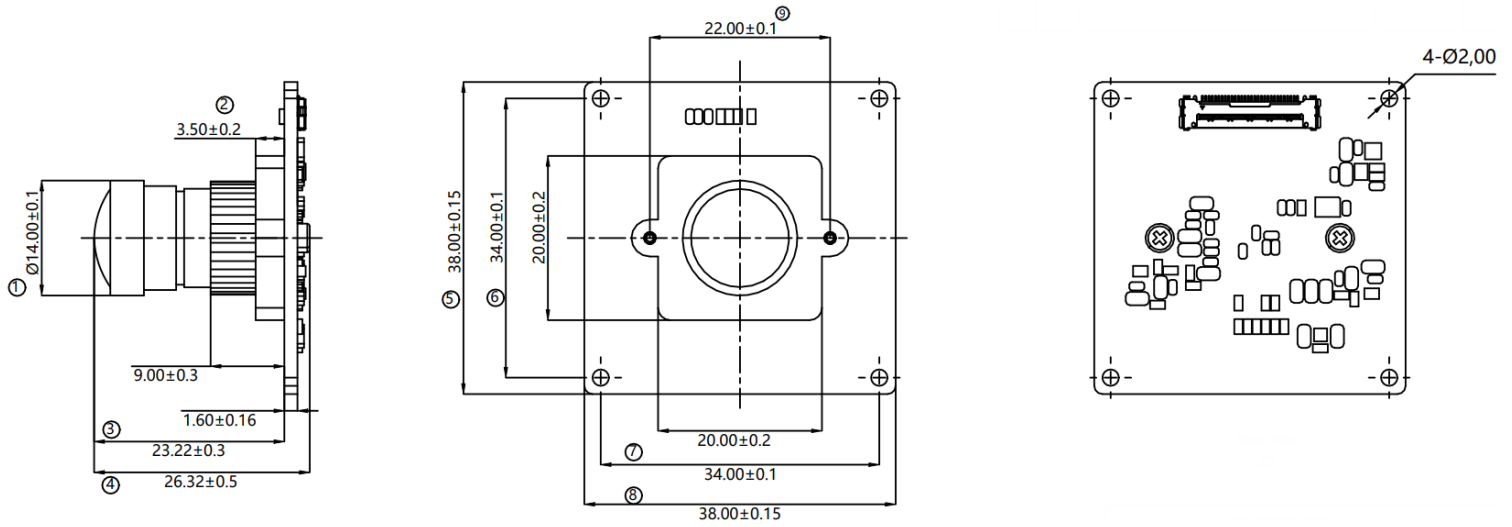
- IoT
- Drone
- Robots

LENS SPECIFICATIONS

Effective Focal Length	3.25 mm $\pm$ 5%
Aperture, F/#	2.60 $\pm$ 5%
Field of View (FOV)	81° horizontal
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5



DIMENSIONS



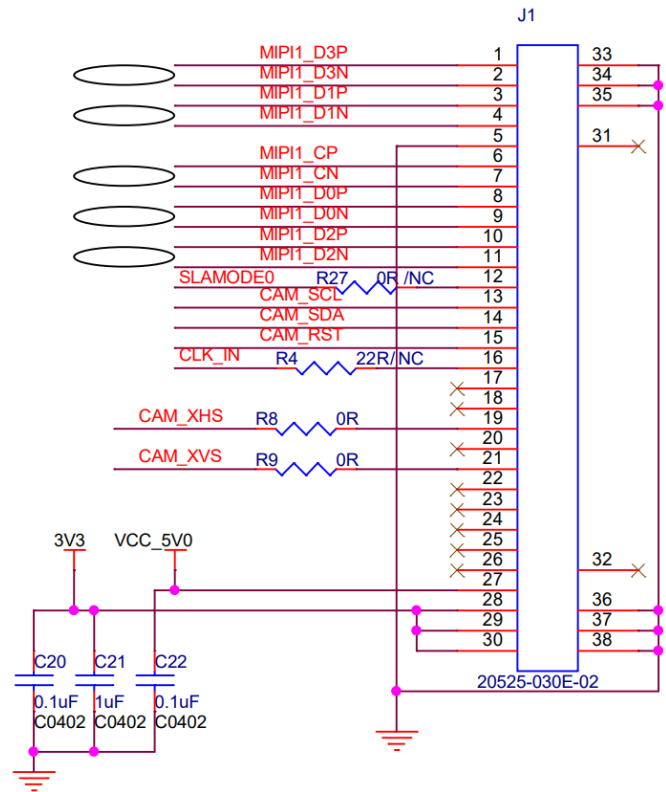
NOTE:

- ⊗ 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 CONNECTOR INTERFACE J1

- 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



MIPI Connector Pinout

Pin No	Signal Name	Pin Type	Description	Voltage Level
1	MIPI_D3P	OUTPUT	MIPI Clock Data3 Differential Pair +	MIPI DPHY
2	MIPI_D3N	OUTPUT	MIPI Clock Data3 Differential Pair -	MIPI DPHY
3	MIPI_D1P	OUTPUT	MIPI Clock Data1 Differential Pair +	MIPI DPHY
4	MIPI_D1N	OUTPUT	MIPI Clock 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 Clock Data0 Differential Pair +	MIPI DPHY
9	MIPI_D0N	OUTPUT	MIPI Clock Data0 Differential Pair -	MIPI DPHY
10	MIPI_D2P	OUTPUT	MIPI Clock Data2 Differential Pair +	MIPI DPHY
11	MIPI_D2N	OUTPUT	MIPI Clock 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	5V
28	3V3	POWER	3.3V power supply	3.3V
29	3V3	POWER	3.3V power supply	3.3V
30	3V3	POWER	3.3V power supply	3.3V

LI-RB-IMX662-MIPI-081H

INTRODUCTION

When connecting IMX662 MIPI camera with Qualcomm platform, following adaptor board and cables will be needed.

P/N for kit connection: **LI-RB-IMX662-MIPI-081H**

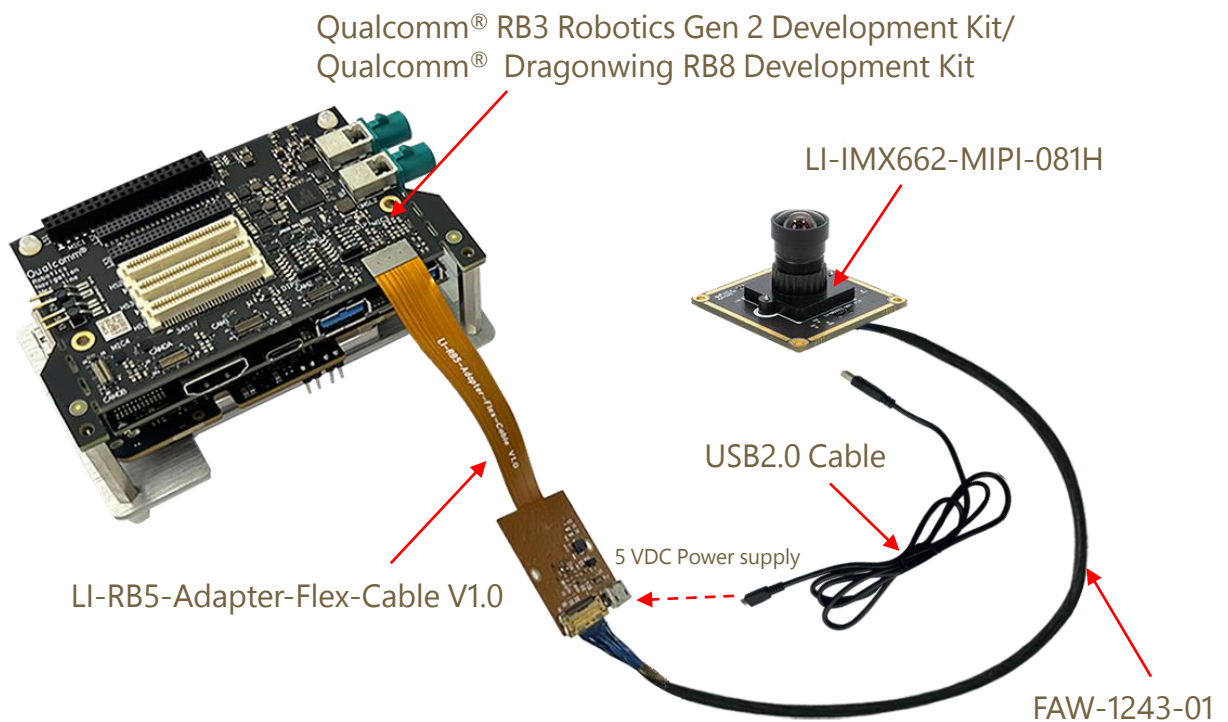
BOM

#	Items	QTY
1	LI-IMX662-MIPI-081H	1
2	LI-RB5-Adapter-Flex-Cable V1.0	1
3	FAW-1243-01	1
4	USB 2.0 Cable (Connecting with platform USB port as camera external power source)	1

NOTE: Qualcomm® Development Kit is **NOT** included.

Supported platform:

- ✓ Qualcomm® RB3 Robotics Gen 2 Development Kit
- ✓ Qualcomm® Dragonwing RB8 Development Kit



LI-RPI-IMX662-MIPI-081H

INTRODUCTION

When connecting IMX662 MIPI camera with Raspberry platform, following adaptor board and cables will be needed.

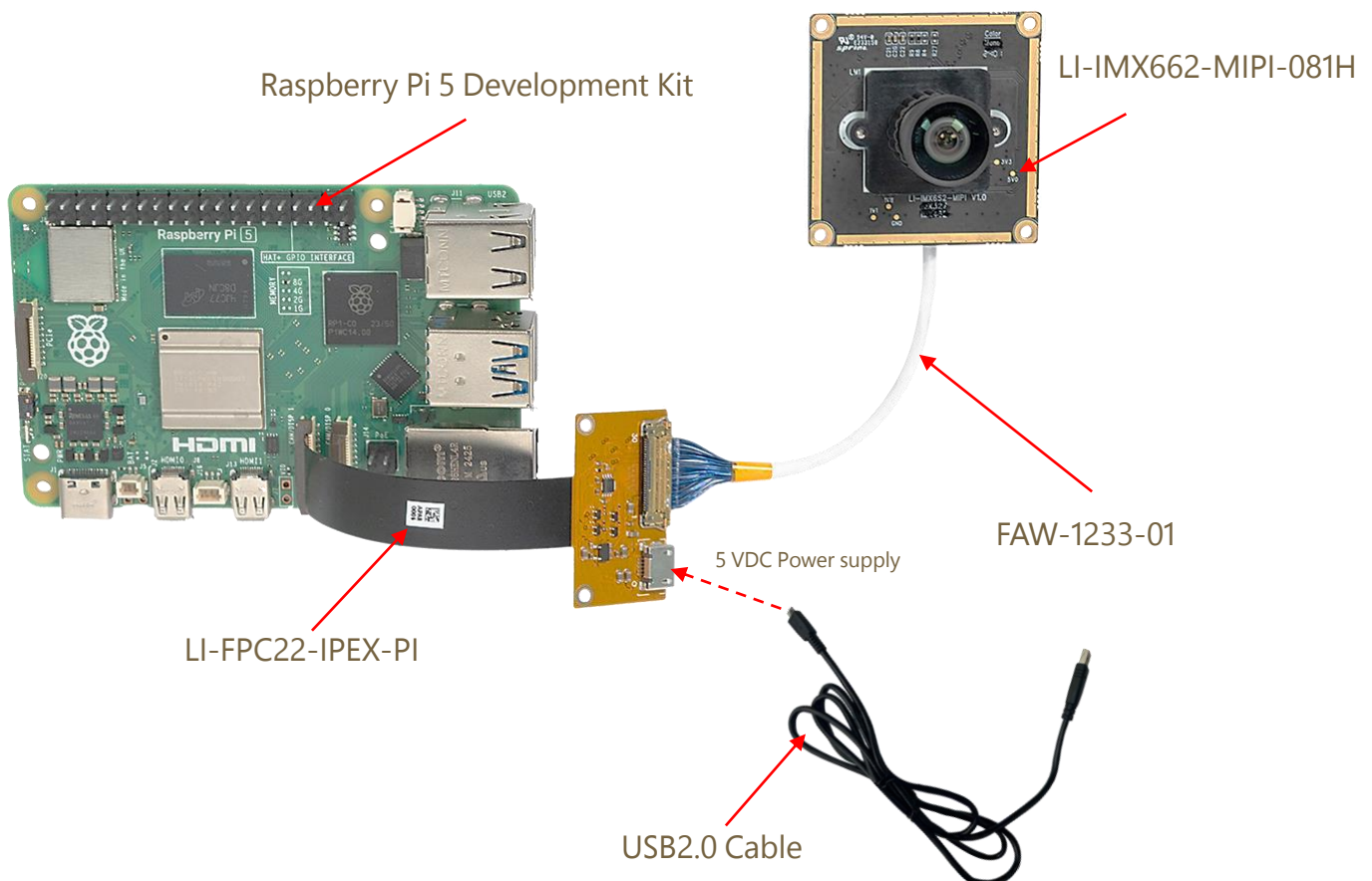
P/N for kit connection: **LI-RPI-IMX662-MIPI-081H**

BOM

#	Items	QTY
1	LI-IMX662-MIPI-081H	1
2	LI-FPC22-IPEX-PI	1
3	FAW-1233-01	1
4	USB 2.0 Cable (Connecting with platform USB port as camera external power source)	1

NOTE: Raspberry Pi 5 Development Kit is **NOT** included.

Supported platform: Raspberry Pi 5 Development Kit



● REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	03 Mar 2023
1.1	1. Updated lens info. 2. Updated MIPI conn info. 3. Added supported platforms info.	26 Aug 2025

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