



LEOPARD
IMAGING

LI-IMX676-FLEX-105H



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INTRODUCTION

The LI-IMX676-FLEX-105H is a MIPI CSI-2 camera with Sony diagonal 10.04 mm (Type 1/1.6) STARVIS2 CMOS color sensor IMX676 which has low power consumption and achieves high sensitivity, low dark current and no smear. This camera outputs RAW data.

SPECIFICATIONS

Sensor	Sony Diagonal 10.04 mm STARVIS2 CMOS Sensor IMX676
Optical Format	1/1.6"
Resolution	3552 (H) x 3552 (V) (active pixels)
Focusing Range	1 m ~ Infinity
Pixel Size	2.0 x 2.0 μ m
Output Format	10-bit / 12-bit RAW data
Maximum Frame Rate	10 bit: 60 fps @ all-pixel scan mode 12 bit: 30 fps @ all-pixel scan mode
HDR (High Dynamic Range)	Supported
ISP	Not included
Color / Mono	Color sensor
Interface	4-lane MIPI CSI-2
Power Consumption	Approx. 0.406 W (15 fps @ 3536 x 3536)
Operating Temp	-30°C ~ +85°C
Storage Temp	-30°C ~ +85°C
Weight	~ 12 g
Part#	LI-IMX676-FLEX-105H

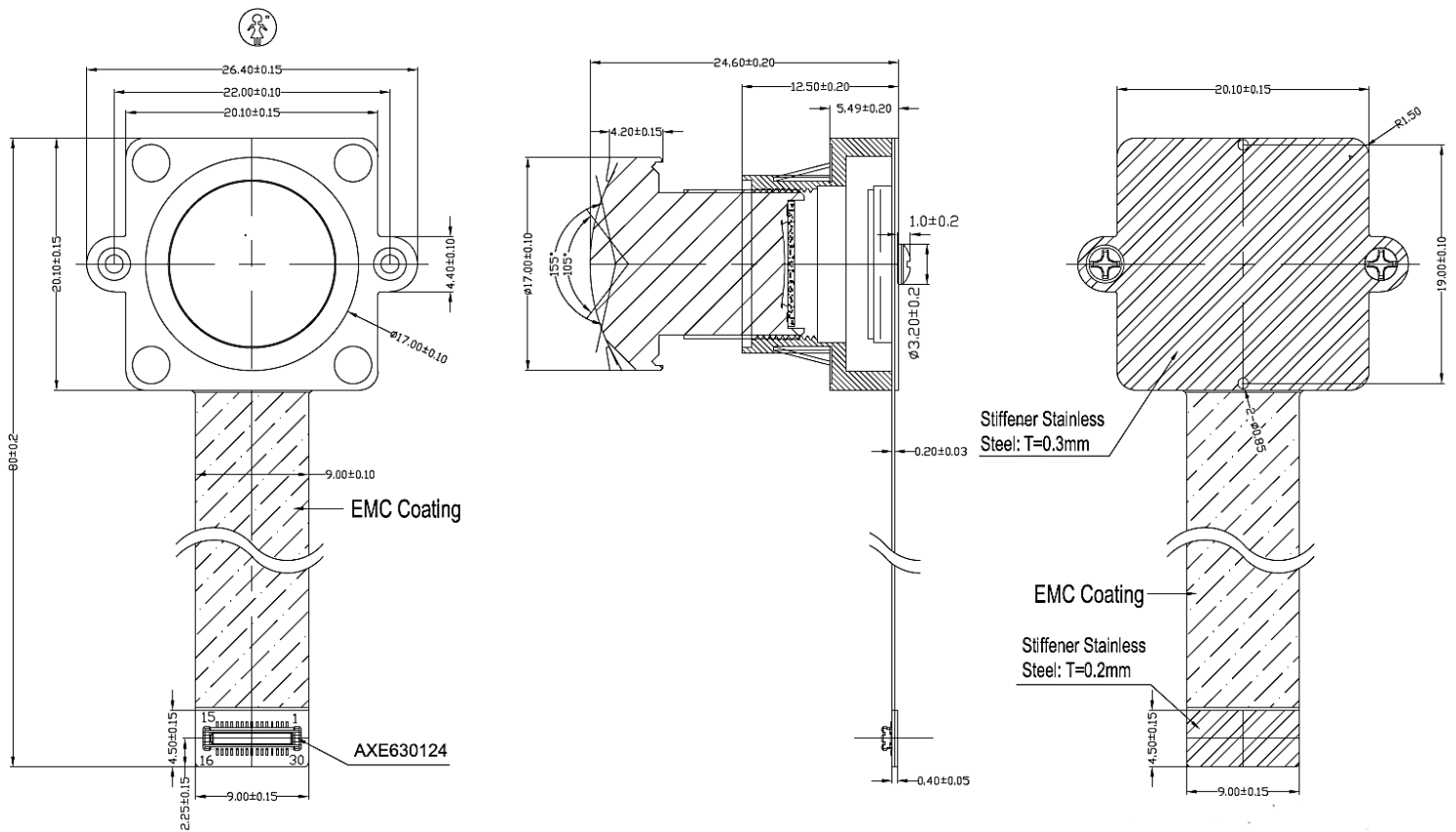
- IoT
- Drone
- Robots

LENS SPECIFICATIONS

Effective Focal Length	4.0 $\pm$ 5% mm
Aperture, F/#	2.0 $\pm$ 5%
Field of View (FOV)	105° horizontal
Distortion	-9.5%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x 0.5



DIMENSIONS

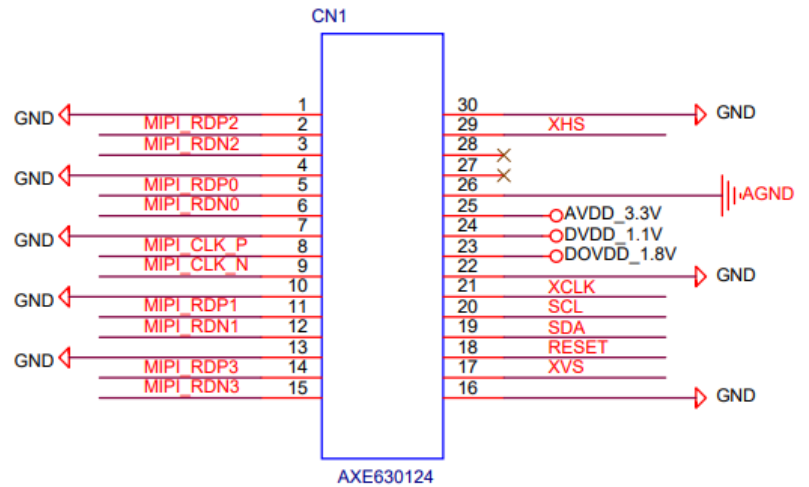


NOTE:

- All materials are compliant with RoHS requirements.
- Unit: mm

INTERFACE CN1

- Connector Part#: AXE630124
- Number of Positions: 30
- Pitch: 0.4 mm



PINOUT DETAILS OF IPEX CONNECTOR (CN 1)

Pin No	Signal Name	Pin Type	Description	Voltage Level
1	GND	GND	Sensor Digital I/O ground	–
2	MIPI_RDP2	OUTPUT	MIPI Data Lane 2 Differential Pair +	MIPI DPHY
3	MIPI_RDN2	OUTPUT	MIPI Data Lane 2 Differential Pair -	MIPI DPHY
4	GND	GND	Sensor Digital I/O ground	–
5	MIPI_RDP0	OUTPUT	MIPI Data Lane 0 Differential Pair +	MIPI DPHY
6	MIPI_RDN0	OUTPUT	MIPI Data Lane 0 Differential Pair -	MIPI DPHY
7	GND	GND	Sensor Digital I/O ground	–
8	MIPI_CLK_P	OUTPUT	MIPI Clock Lane Differential Pair +	MIPI DPHY
9	MIPI_CLK_N	OUTPUT	MIPI Clock Lane Differential Pair -	MIPI DPHY
10	GND	GND	Sensor Digital I/O ground	–
11	MIPI_RDP1	OUTPUT	MIPI Data Lane 1 Differential Pair +	MIPI DPHY
12	MIPI_RDN1	OUTPUT	MIPI Data Lane 1 Differential Pair -	MIPI DPHY
13	GND	GND	Sensor Digital I/O ground	–
14	MIPI_RDP3	OUTPUT	MIPI Data Lane 3 Differential Pair +	MIPI DPHY

Pin No	Signal Name	Pin Type	Description	Voltage Level
15	MIPI_RDN3	OUTPUT	MIPI Data Lane 3 Differential Pair -	MIPI DPHY
16	GND	GND	Sensor Digital I/O ground	–
17	XVS	I/O	Vertical sync signal	1.8 V
18	RESET	OUTPUT	System clear	1.8 V
19	SDA	I/O	Camera I2C SDA signal	1.8 V
20	SCL	INPUT	Camera I2C SCL signal	1.8 V
21	XCLK	INPUT	Master clock input	1.8 V
22	GND	GND	Sensor Digital I/O ground	–
23	DOVDD_1.8V	POWER	1.8 V power supply	1.8 V
24	DVDD_1.1V	POWER	1.1 V power supply	1.1 V
25	AVDD_3.3V	POWER	3.3 V power supply	3.3 V
26	AGND	POWER	AGND	–
27	NC	-	No Connection	–
28	NC	-	No Connection	–
29	XHS	I/O	Horizontal sync signal	1.8 V
30	GND	GND	Sensor Digital I/O ground	–

LI-RB-IMX676-FLEX-105H

INTRODUCTION

When connecting LI-IMX676-FLEX-105H camera with Qualcomm platform, following adaptor board will be needed.

P/N for kit connection: **LI-RB-IMX676-FLEX-105H**

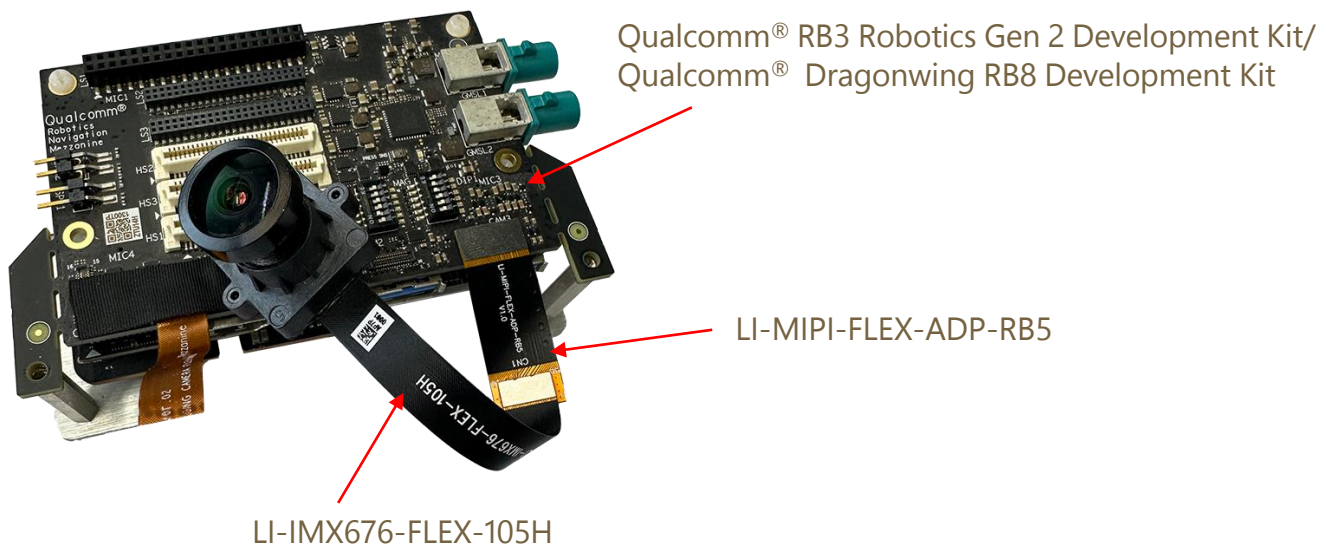
BOM

#	Items	QTY
1	LI-IMX676-FLEX-105H	1
2	LI-MIPI-FLEX-ADP-RB5	1

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

Supported platform:

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



● REVISION HISTORY

Revision	Description	Release Date
1.0	First Release.	17 Jun 2025
1.1	Added supported platform and BOM.	23 Jun 2025
1.2	Updated supported platform info.	21 Aug 2025
1.3	Updated the interface pin-29 details.	27 Oct 2025

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