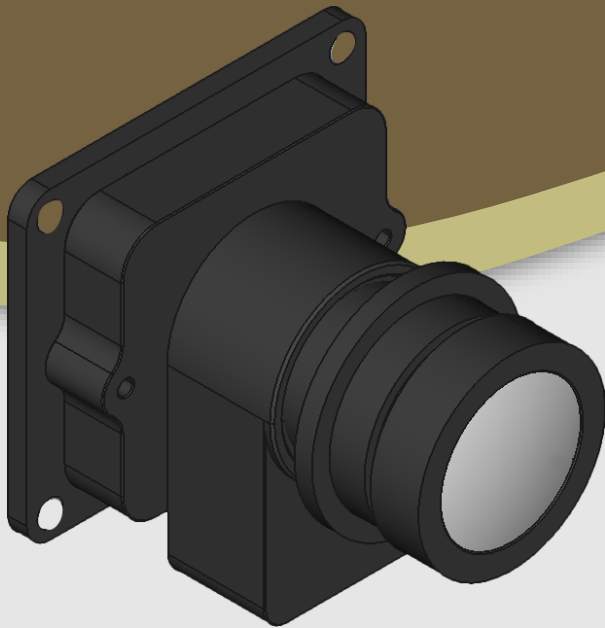




**LEOPARD**  
IMAGING

# LI-IMX678-MIPI-HL-118H



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## INTRODUCTION

The LI-IMX678-MIPI-HL-118H is a MIPI CSI-2 camera with Sony diagonal 8.86 mm (Type 1/1.8) STARVIS2 CMOS color sensor IMX678 which has low power consumption and achieves high sensitivity, low dark current and no smear. This camera is compatible with Hailo AI Platform Hailo-15.

## SPECIFICATIONS

Sensor	Sony Diagonal 8.86 mm STARVIS2 CMOS Sensor IMX678
Optical Format	1/1.8"
Resolution	3856 (H) x 2176 (V) (active pixels)
Pixel Size	2.0 x 2.0 $\mu\text{m}$
Output Format	10-bit / 12-bit RAW data
Maximum Frame Rate	60 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	TBD
Operating Temp	-30°C ~ +85°C
Storage Temp	-40°C ~ +85°C
Weight	TBD
Part#	LI-IMX678-MIPI-HL-118H

## APPLICATIONS

- IoT
- Drone
- Robots

## LENS SPECIFICATIONS

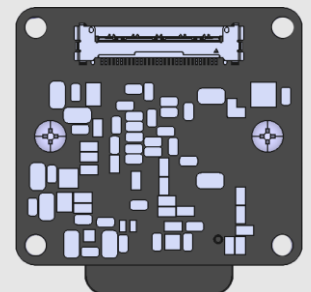
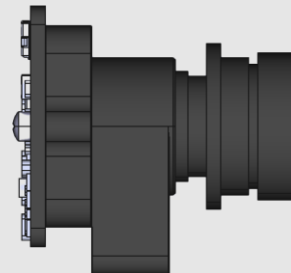
Effective Focal Length	4.063 mm
Aperture, F/#	2.29 $\pm$ 5%
Field of View (FOV)	118° horizontal
Optical Distortion	-28.1%
TV Distortion	-9.3%
Relative Illumination	59.1%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x 0.5

## BOM

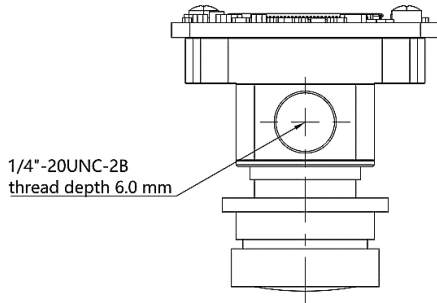
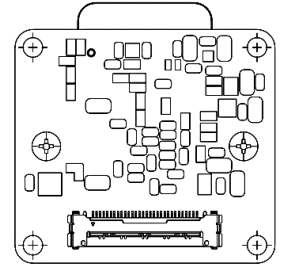
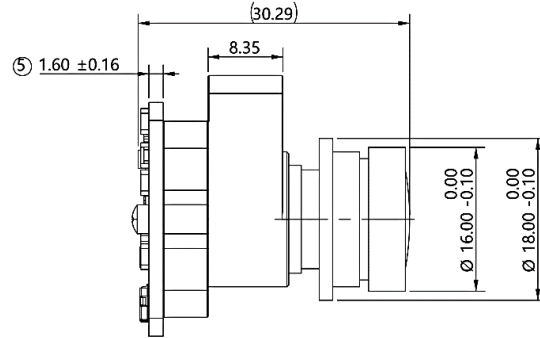
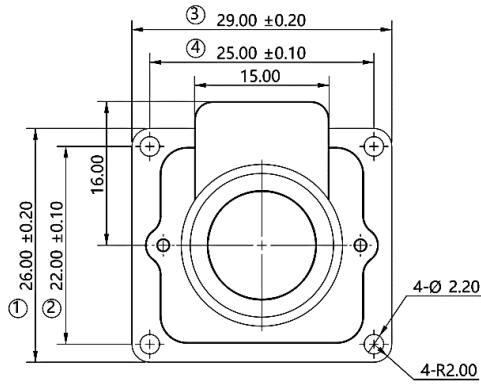
#	Items	QTY
1	LI-IMX678-MIPI-HL-118H	1
2	FAW-1233-03 cable	1

### NOTE:

Hailo-15 Developer board is **NOT** included.



# DIMENSIONS



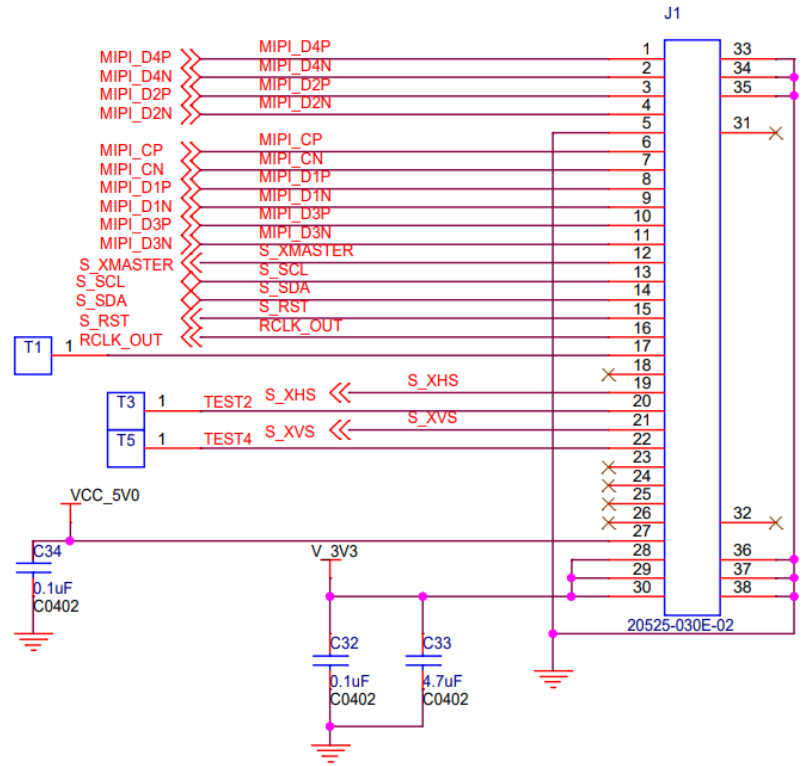
TOLERANCE TABLE					
LENGTH TOLERANCE		CHAMFER TOLERANCE		ANGLE TOLERANCE	
Size X	Tolerance	Size X	Tolerance	Size X	Tolerance
0.5 < X ≤ 3	±0.1	0.5 < X ≤ 3	±0.2	X ≤ 10	±1°
3 < X ≤ 6	±0.1	3 < X ≤ 6	±0.5	10 < X ≤ 50	±30'
6 < X ≤ 30	±0.2	6 < X ≤ 30	±1	50 < X ≤ 120	±20'
30 < X ≤ 120	±0.3	X > 30	±2	120 < X ≤ 400	±10'
120 < X ≤ 400	±0.5			X > 400	±5'
400 < X ≤ 1000	±0.8				
X > 1000	±1.2				

## NOTE:

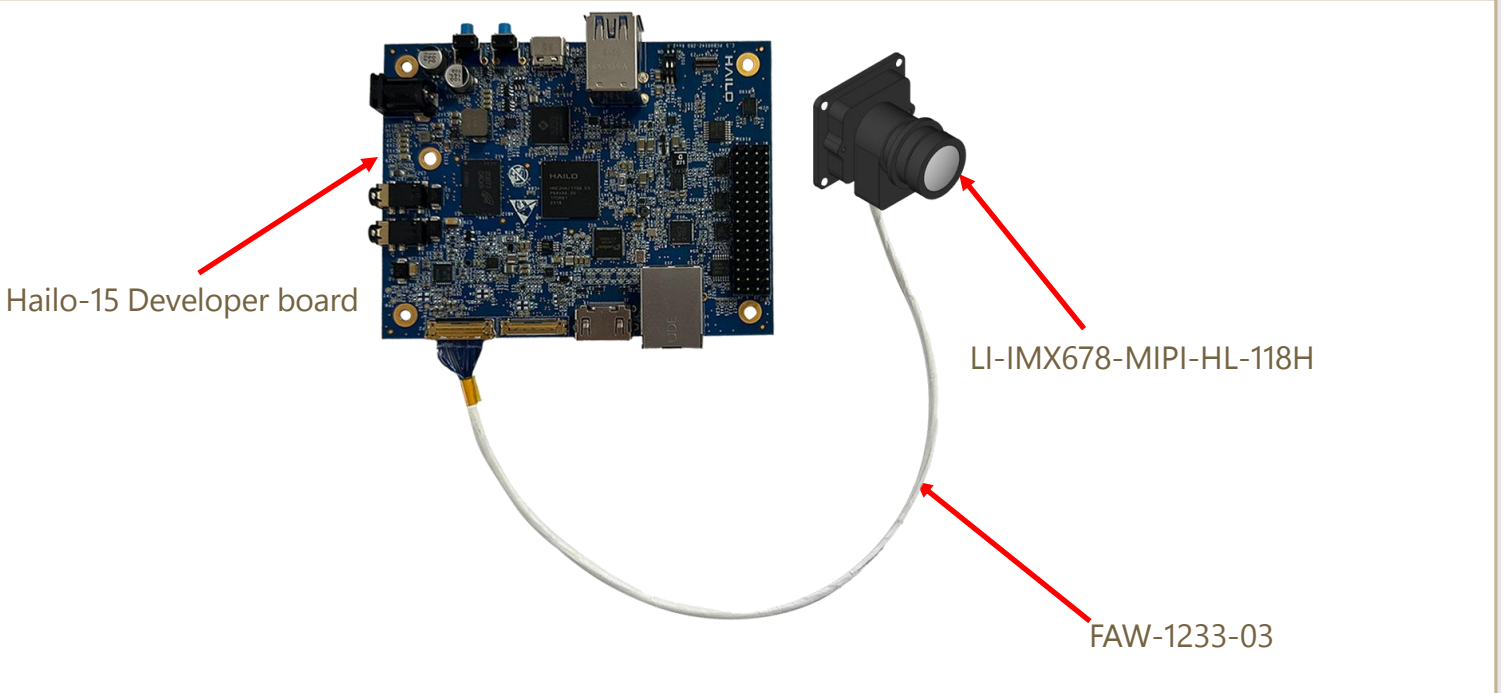
- ⊗ marked are important sizes.
- Tolerances for the unmarked – refer to the Tolerance table.
- All materials are compliant with RoHS requirements.
- Unit: mm

## 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: 0x1A (7-bit)
- External Power Supply: 3.3V, 5.0V
- 3.3V (analog), 1.8V and 1.1V are generated from board



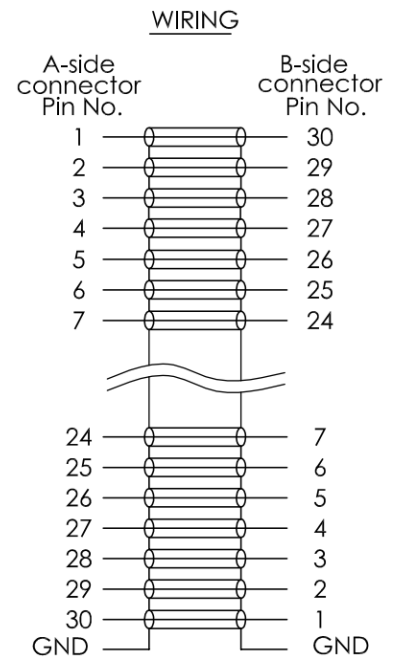
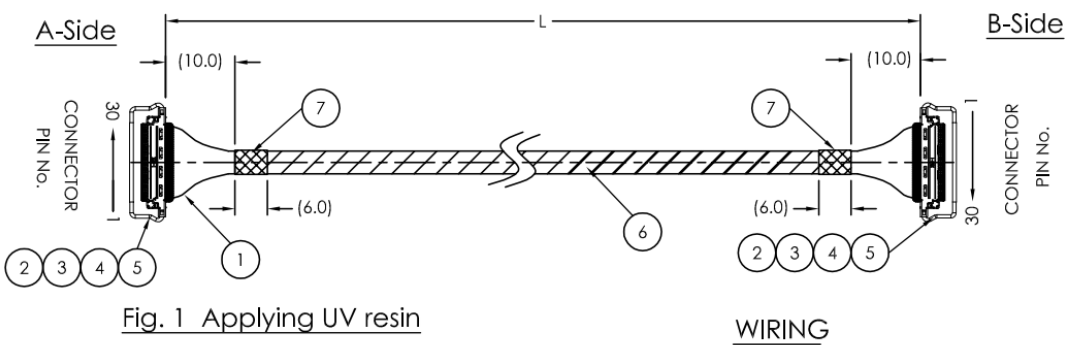
## CAMERA CONNECTION WITH HAILO-15



# FAW-1233-03 Cable



## MECHANICAL DIAGRAM



### NOTE:

- Total length: 300.0 ± 10.0.
- Apply UV resin at the end of connector to cover cables both sides of the cable assembly (Fig.1).

Unit: mm

## ● REVISION HISTORY

Revision	Description	Release Date
0.1	Initial draft.	31 Jan 2024
0.2	1. Added Compatible Platform, BOM and CAMERA CONNECTION WITH HAILO-15. 2. Add <b>FAW-1233-03 Cable</b> page.	20 Feb 2024

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