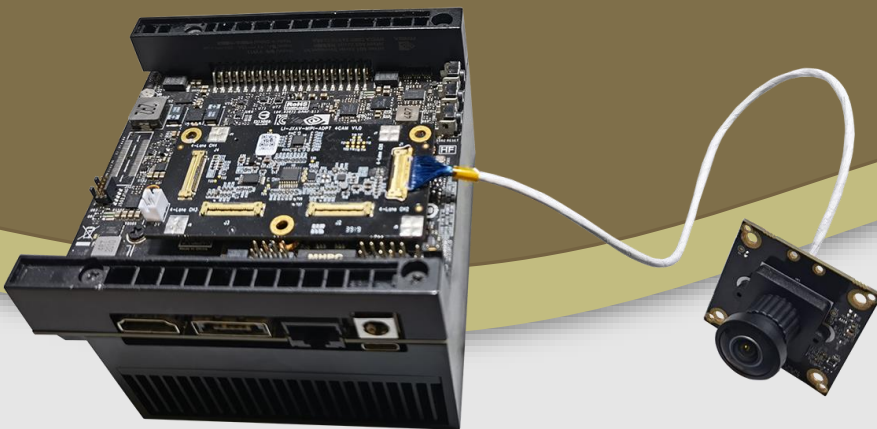




LEOPARD
IMAGING

LI-XAVIER-KIT-IMX477-140H



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KEY FEATURES

- Compatible with Nvidia® Jetson AGX Xavier™ Developer Kit
- MIPI CSI-2 interface
- Adapter board: LI-JXAV-MIPI-ADPT-4CAM
- Sensor: Sony diagonal 7.857 mm (Type 1/2.3) 12.3MP CMOS image sensor IMX477
- Active pixels: 4056 (H) x 3040 (V)
- Color camera
- Length of the I-PEX cable: ~ 300 mm
- Support multiple length cables
- Connector Part#: 20525-030E-02
- Provide customization services
- Part#: LI-XAVIER-KIT-IMX477-140H

APPLICATIONS

- IoT
- Drone
- Robots

LENS SPECIFICATIONS

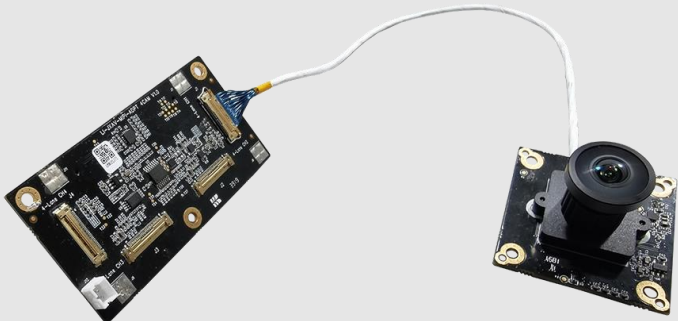
Focal Length	2.7 mm ± 5%
Focusing Distance	22.5 cm ~ 500 cm
Aperture, F/#	2.5 ± 5%
Field of View (FOV)	185° diagonal
	140° horizontal
	103° vertical
Optical Distortion	-75%
TV Distortion	-26%
Relative Illumination	63%
IR Filter	650 nm IR cut filter
Lens Mount	M12 x P0.5

BOM

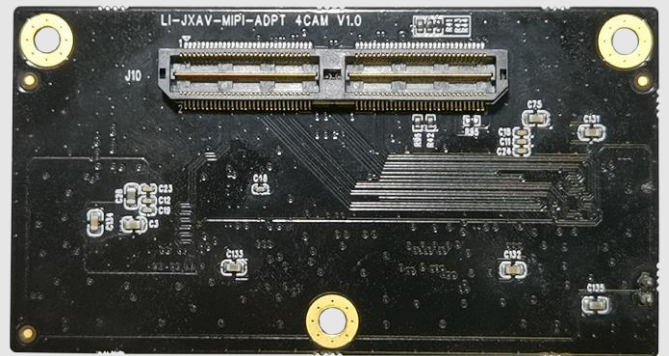
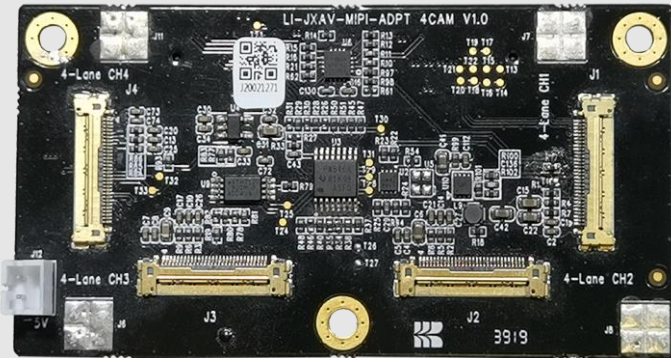
#	Items	QTY
1	LI-JXAV-MIPI-ADPT-4CAM	1
2	LI-IMX477-MIPI-140H	1
3	FAW-1233-03 cable	1

NOTE:

Nvidia® Jetson AGX Xavier™ Developer Kit is **NOT** included.



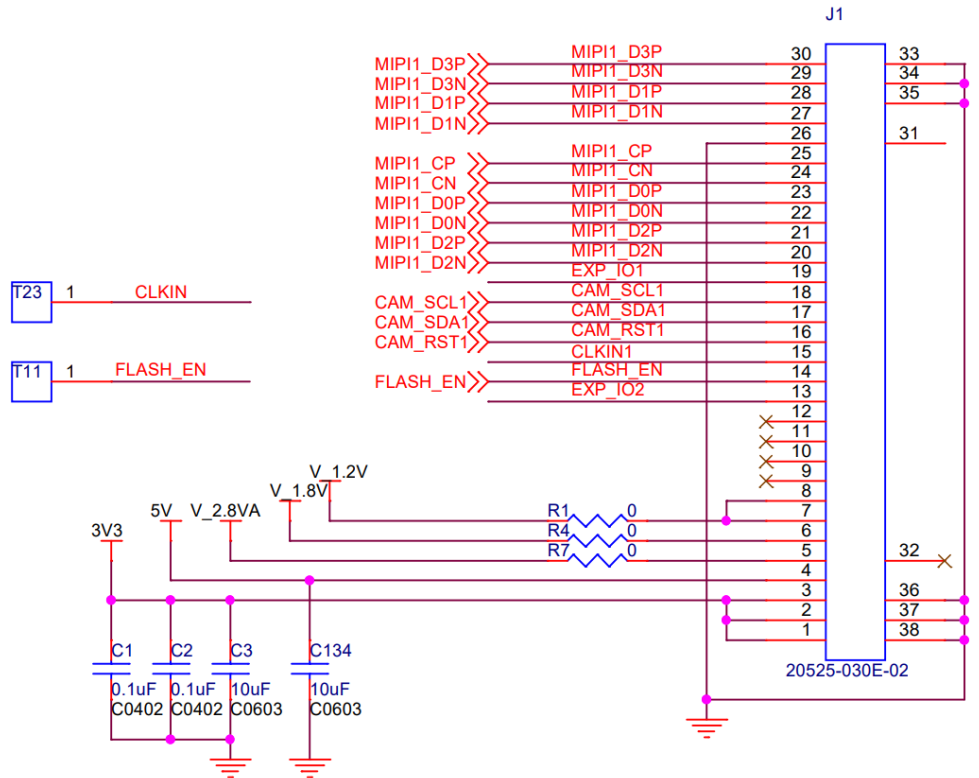
LI-JXAV-MIPI-ADPT-4CAM



INTERFACES

Interface J1

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-XX

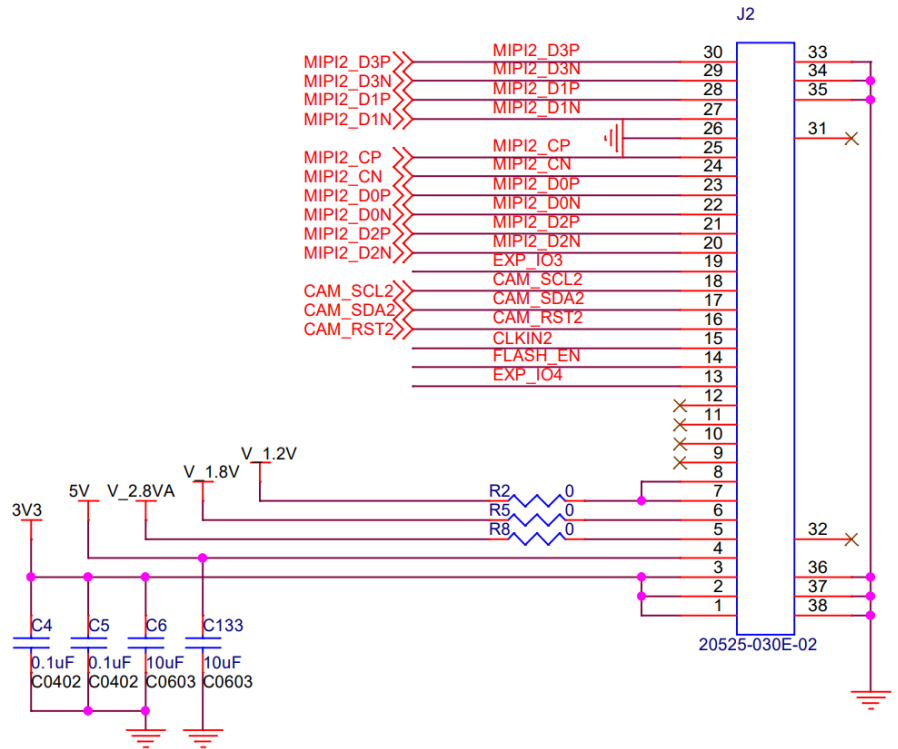


LI-JXAV-MIPI-ADPT-4CAM

INTERFACES

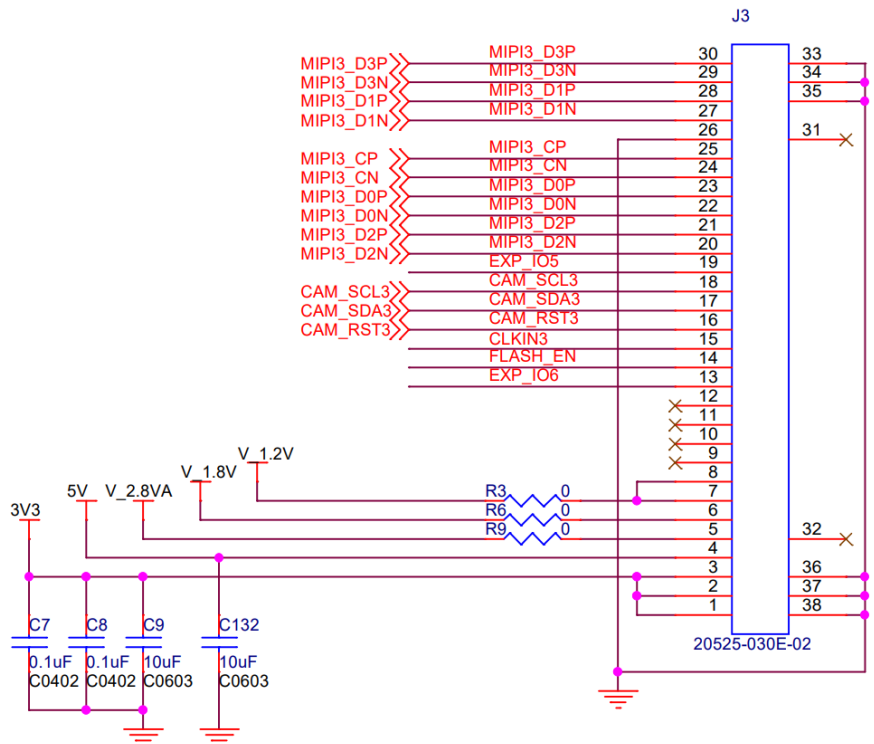
Interface J2

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-XX



Interface J3

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-XX

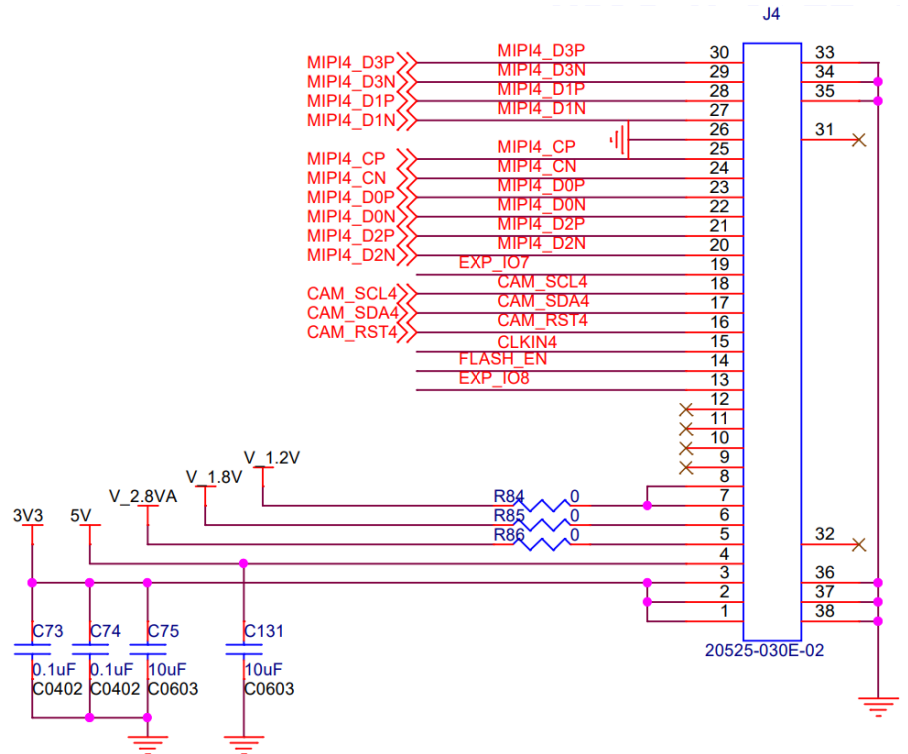


LI-JXAV-MIPI-ADPT-4CAM

INTERFACES

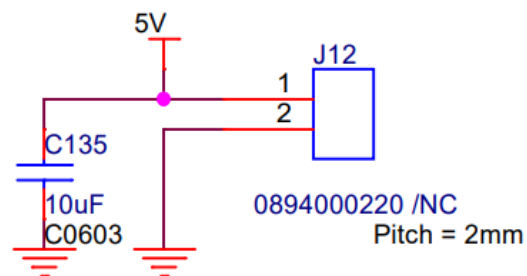
Interface J4

- Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233-XX



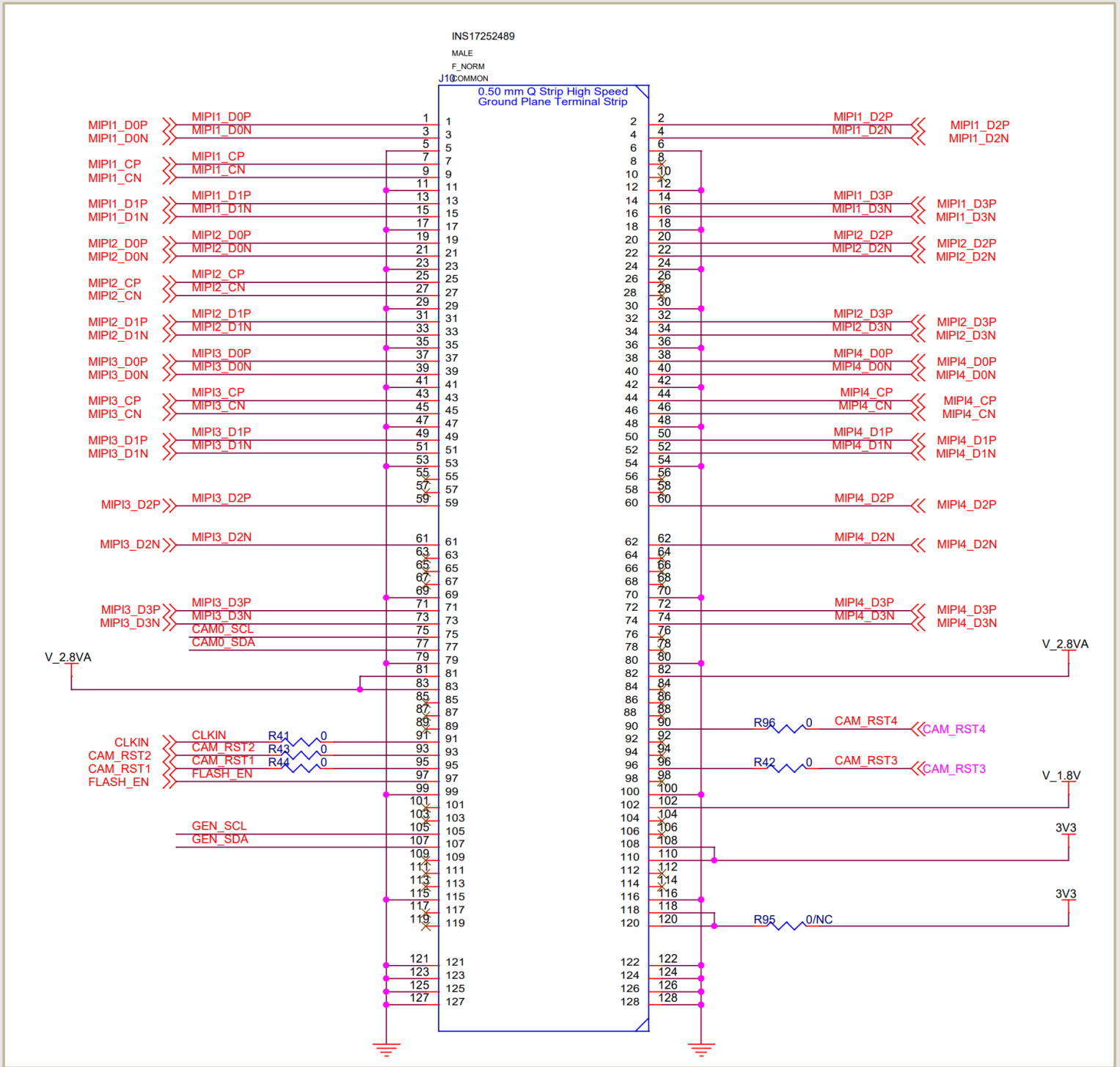
Interface J12 (NOT Used)

- Part#: 0894000220
- Number of Positions: 2
- Pitch: 2 mm



LI-JXAV-MIPI-ADPT-4CAM

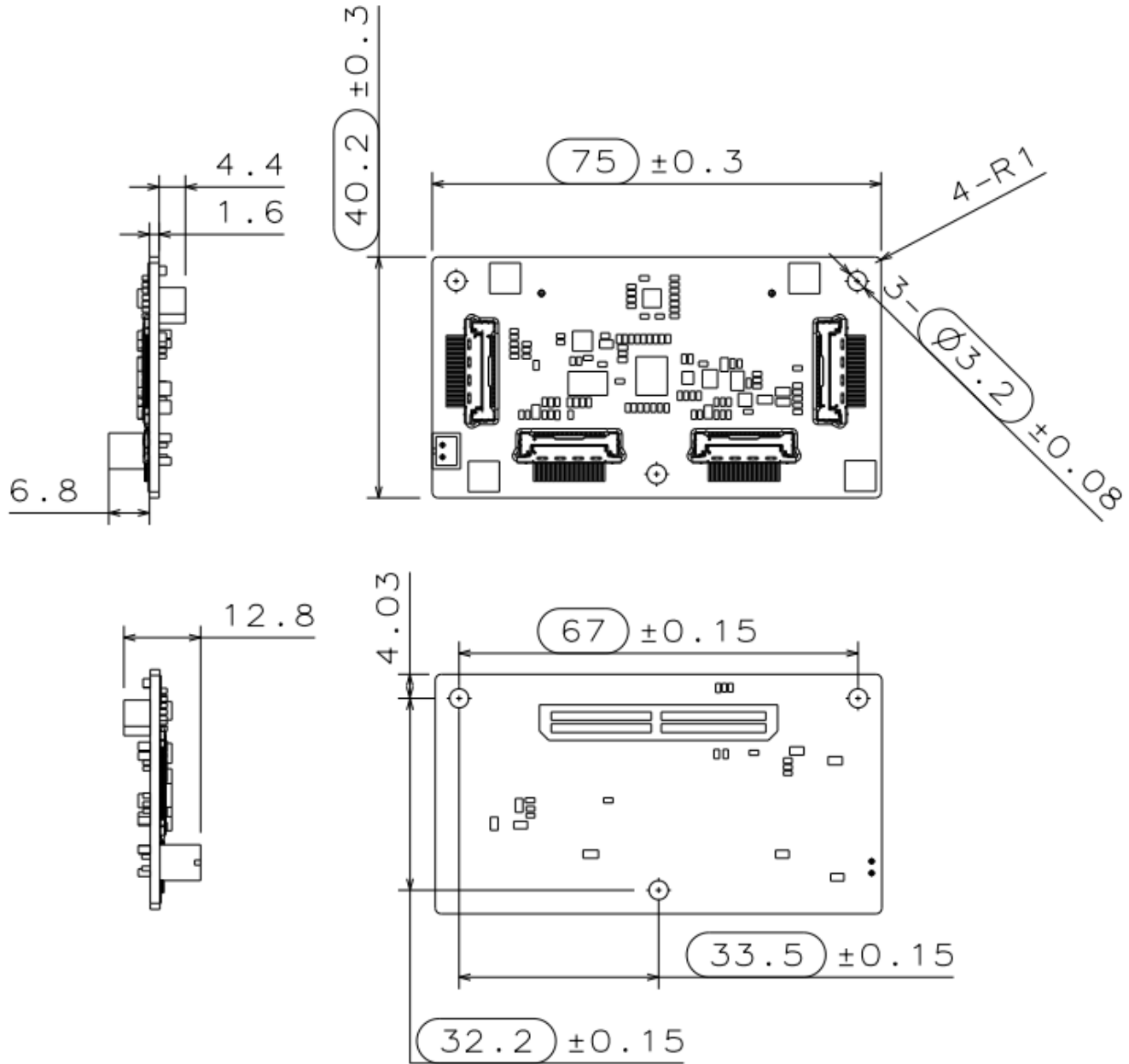
INTERFACE J10 (To Xavier)



- Part#: QTH-060-01-L-D-A
- Number of Positions: 120
- Number of Rows: 2
- Pitch: 0.5 mm
- J10 is used to connect to Nvidia® Jetson AGX Xavier™ Developer Kit

LI-JXAV-MIPI-ADPT-4CAM

DIMENSIONS



Note:

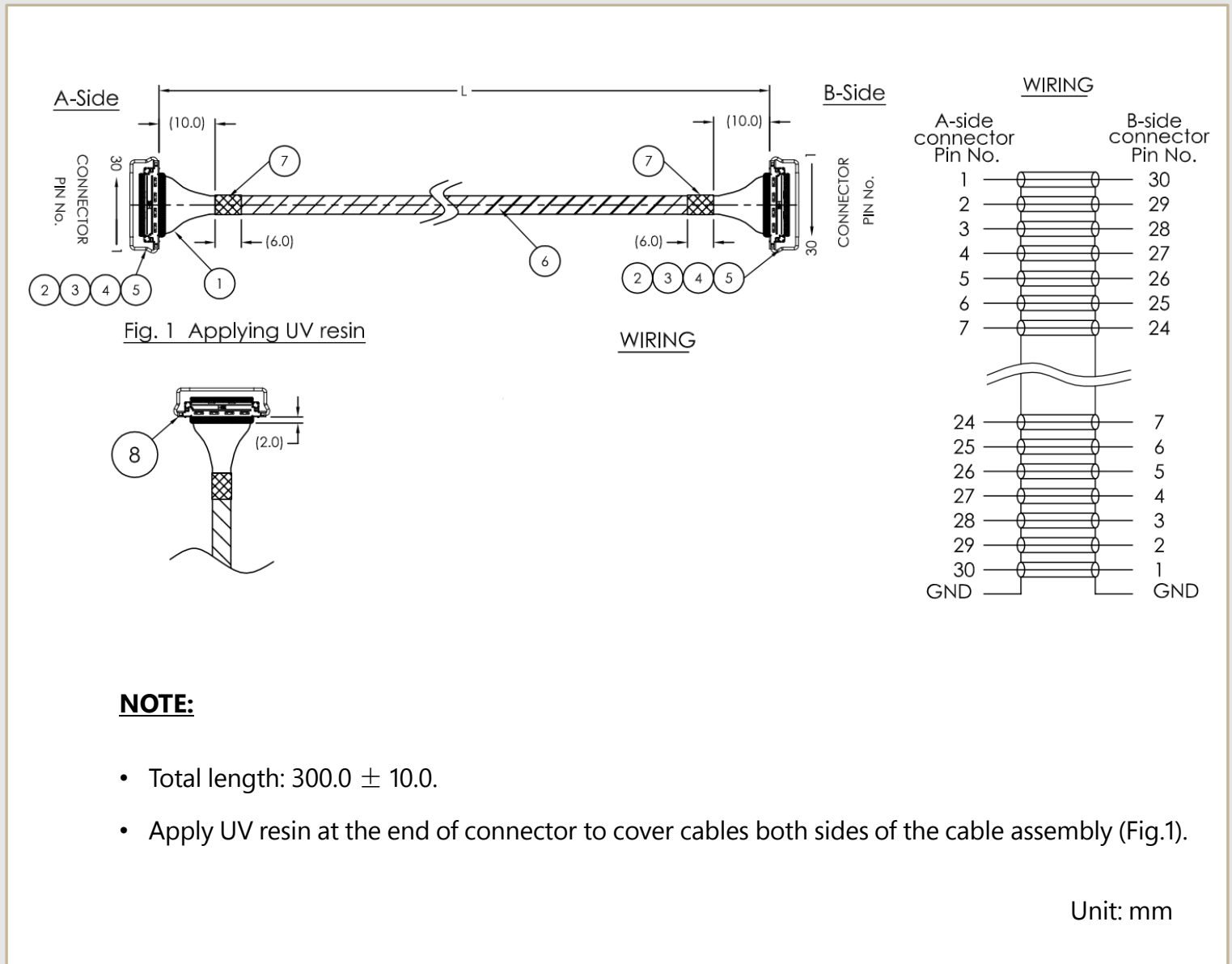
- ◻ marked are important sizes.
- Tolerance for others unmarked is ± 0.3 mm.

Unit: mm

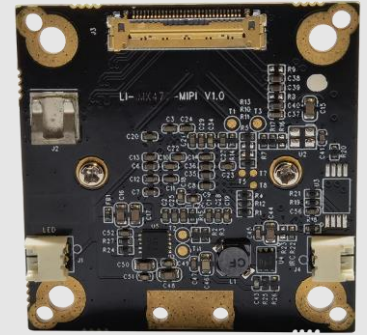
FAW-1233-03 Cable



MECHANICAL DIAGRAM



LI-IMX477-MIPI-140H



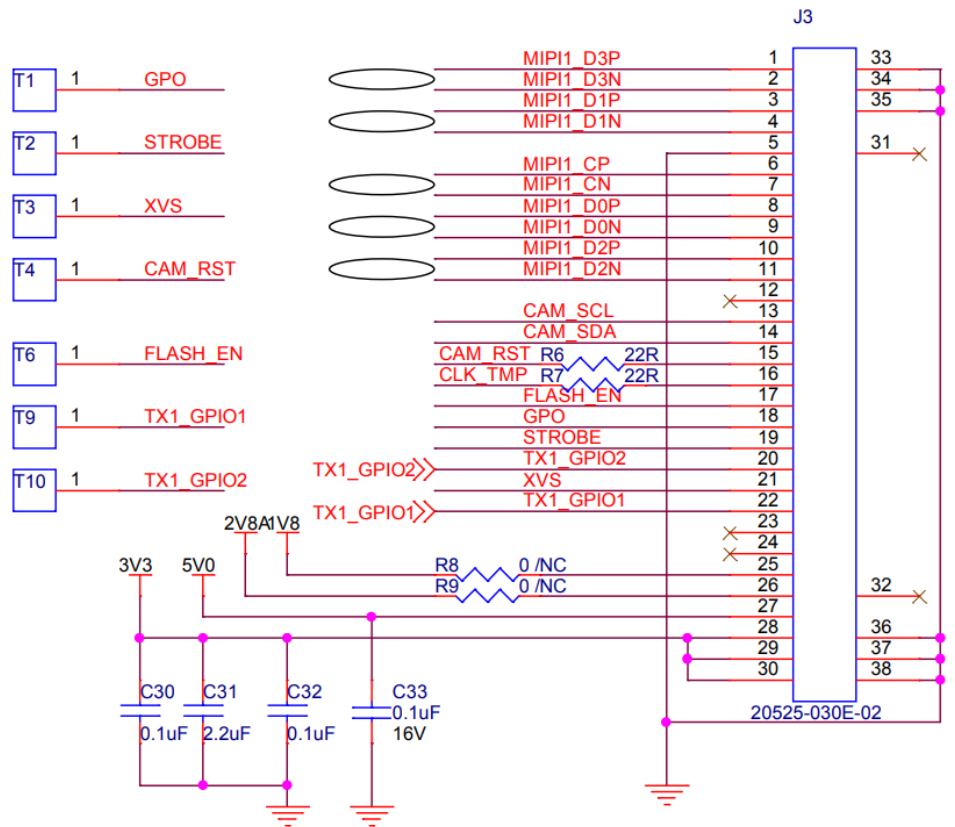
CAMERA SPECIFICATIONS

Sensor	Sony Diagonal 7.857 mm (Type 1/2.3) 12.3MP CMOS Image Sensor IMX477
Optical Format	1/2.3"
Resolution	4056 (H) x 3040 (V) (active pixels)
Pixel Size	1.55 x 1.55 μm
Output Format	8-bit / 10-bit / 12-bit RAW data
Maximum Frame Rate	60 fps @ 4056 x 3040
ISP	Not included
EEPROM	Included for calibration data
Color / Mono	Color sensor
Interface	4-lane MIPI CSI-2
Power Consumption	122 mA @ 3.3 VDC
Weight	~ 16 g
Part#	LI-IMX477-MIPI-140H

LI-IMX477-MIPI-140H

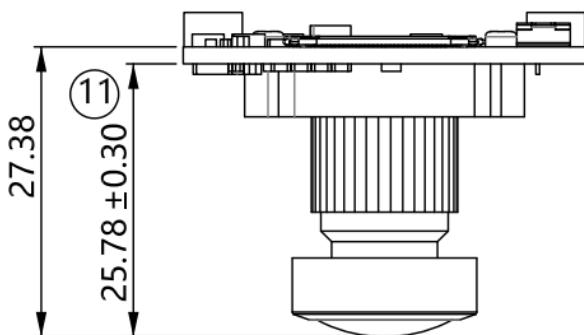
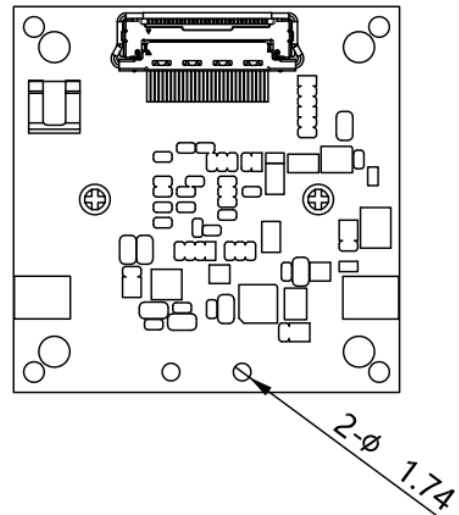
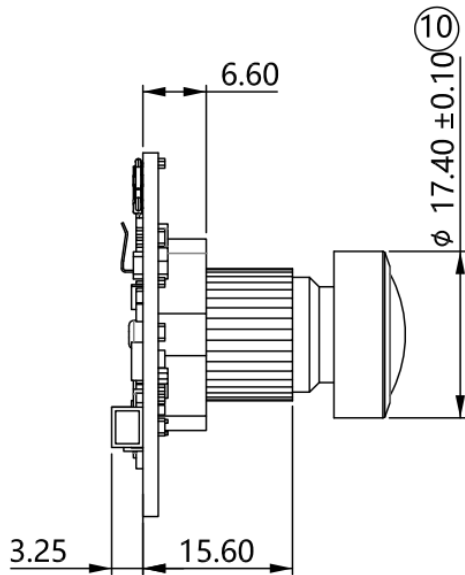
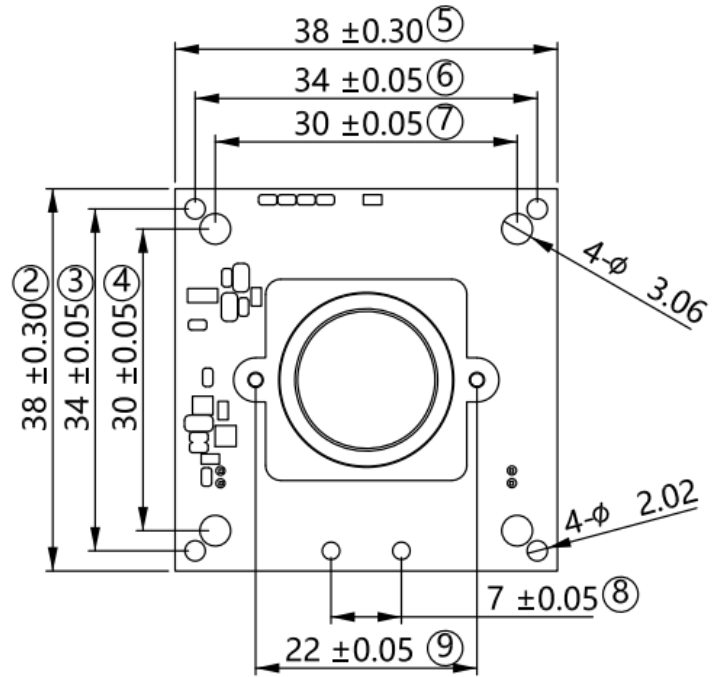
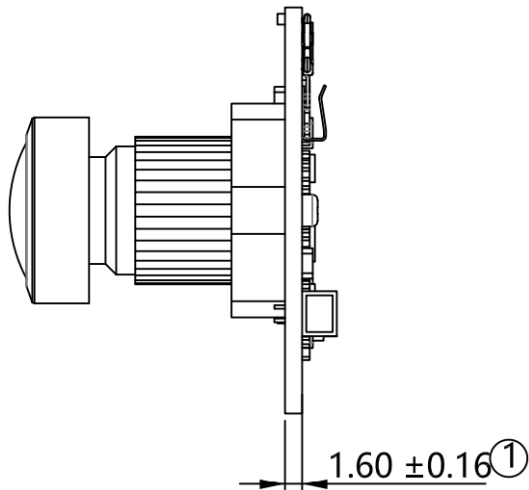
INTERFACE

- Connector Part#: 20525-030E-02
- Number of Positions: 30
- Pitch: 0.4 mm
- Mating I-PEX Cable: FAW-1233
- Sensor I2C Address: 0x10 (7-bit)
- Sensor input clock needs to be supplied from pin 16.
- External Power Supply: 3.3V, 5.0V
- 2.8V, 1.8V, 1.05V are generated from board.
- 5.0V is not used since it's for IR cut switch function only.



LI-IMX477-MIPI-140H

DIMENSIONS



Note:

- ⊗ marked are important sizes.
- Tolerance for others unmarked is ± 0.3 mm.

Unit: mm

- REVISION HISTORY

Revision	Description	Release Date
1.0	First release.	22 Oct 2021
1.1	Deleted quoted info from sensor spec.	26 May 2022

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