

Arducam[®]

Datasheet

IMX477 HQ Camera Module

B0249

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1. Purpose

In order to fully describe the technical specifications referred to in technical cooperation, it usually needs to be expressed by a complete set of documents. As part of this, this datasheet specifies the specific technical specifications that a camera module should meet and is binding on this model.

2. Efficacy

This datasheet shall prevail if it's inconsistent with the specifications in the general technical specifications of such goods.

3. Technical Parameters

Items	Parameters
Sensor	1/2.3" IMX477
Maximum Effective Resolution	4056(H) x 3040(V).
Output Video Format	RAW 12/10/8
Pixel Size	1.55um x 1.55um
Lens	Format: 1/2.3 inch
	Focal Length: 6mm
	Aperture (F): Max. F1.2
	Field of View (FOV): 65° (H)
	MOD: 0.2m
	Dimension: $\Phi 30 \times 31$ mm
	Back Focal Length: 7.53mm
	Weight: 53g
IR Sensitivity	Visible light
Frame rate	depends on the target platform, maximum fps limit might apply 1920x1080 @ 60fps 4032x3040 @ 30fps
Interface	4-lane MIPI CSI2
Default Lens Mount	CS-Mount
Dimension	38mmx38mm
Hole Pitch	Compatible with 29mm, 30mm, 34mm

4. Package Contents

1 pcs 12.3MP IMX477 color camera module

1 pcs 6mm focal length CS-mount camera lens

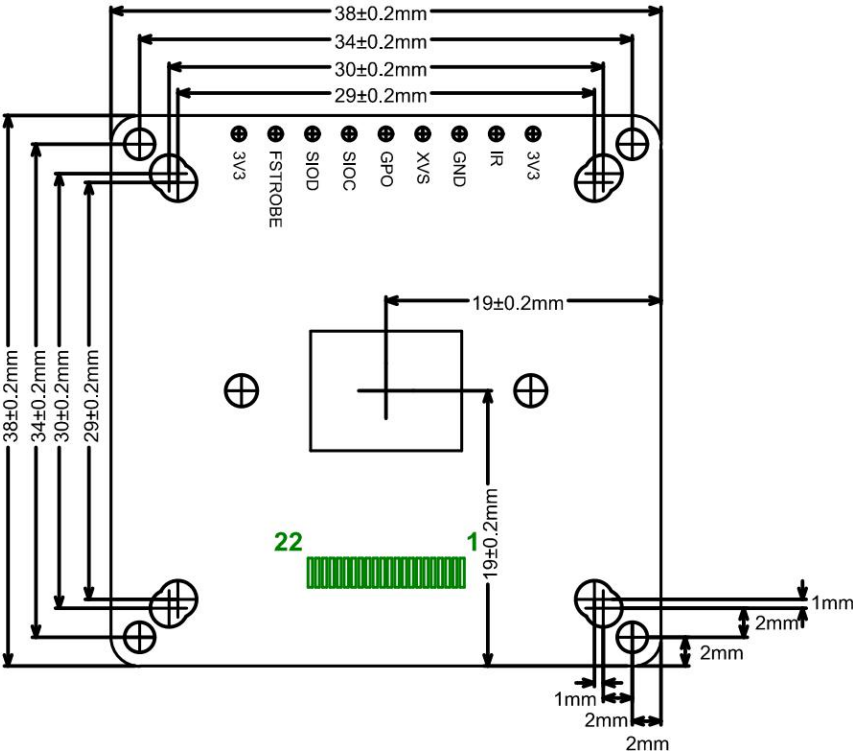
1 pcs 300mm/12inch 15pin to 22pin camera cable

1 pcs 80mm/3.1inch 22pin camera cable

5. Pin Definition

15 Pin #	15 Pin Name	Desc.	22 Pin Name	22 Pin #
1	GND	Ground	GND	1
2	CAM_D0_N	MIPI Data Lane 0 Negative	CAM_D0_N	2
3	CAM_D0_P	MIPI Data Lane 0 Positive	CAM_D0_P	3
4	GND	Ground	GND	4
5	CAM_D1_N	MIPI Data Lane 1 Negative	CAM_D1_N	5
6	CAM_D1_P	MIPI Data Lane 1 Positive	CAM_D1_P	6
7	GND	Ground	GND	7
8	CAM_CK_N	MIPI Clock Lane Negative	CAM_CK_N	8
9	CAM_CK_P	MIPI Clock Lane Positive	CAM_CK_P	9
		Ground	GND	10
		MIPI Data Lane 2 Negative	CAM_D2_N	11
		MIPI Data Lane 2 Positive	CAM_D2_P	12
		Ground	GND	13
		MIPI Data Lane 3 Negative	CAM_D3_N	14
		MIPI Data Lane 3 Positive	CAM_D3_P	15
10	GND	Ground	GND	16
11	CAM_IO0	Power Enable	CAM_IO0	17
12	CAM_IO1	LED Indicator	CAM_IO1	18
		Ground	GND	19
13	CAM_SCL	I2C SCL	CAM_SCL	20
14	CAM_SDA	I2C SDA	CAM_SDA	21
15	CAM_3V3	3.3V Power Output	CAM_3V3	22

6. Shape and Dimensions



7. Lens Specification



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ArduCam®
Model No: **CS2006ZM06**

LENS SPECIFICATIONS

Part No.	CS2006ZM06	F/NO	F1.2
Optical Format	1/2.3"	Iris type	Manual
EFL(mm)	6	Mount	CS-Mount
BFL(mm)	7.53	Focus range	0.2m-∞
Construction	6G+Aluminum alloy	MOD	0.2m
FOV	65°(H)	Size(mm)	Φ30 x 31
35mm EFL *	28	Weight	53g

* 35mm Equivalent Focal Length for 1/2.3" RPI HQ Camera


MECHANICAL DRAWING



Size tolerance (mm)	0-10.00.05	10.00-30.00	30-120.00.05
Angle tolerance	±2°		

REFERENCE DIAGRAM



8. Others

For Further Instruction, Please Visit Doc Page: <https://www.arducam.com/docs/camera-for-jetson-nano/native-jetson-cameras-imx219-imx477/imx477/>

Email: support@arducam.com