Arducam®

Datasheet

IMX477 HQ Camera Module

B0251

CONTENT

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. Efficacity

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) 12.3MP
Output Video Format	RAW 12/10/8
Pixel Size	1.55um x 1.55um
Lens	Format: 1/2.3 inch
	Focal Length: 3.9mm
	Aperture (F): F2.8
	Field of View (FOV): 75° (H)
	MOD: 0.1m Dimension: Φ14×18.67mm
	Weight: 5g
	Mount: M12 Mount
	Back Focal Length: 4.49mm
IR Sensitivity	Visible light
Frame rate	(depends on the target platform, maximum fps limit might apply) 1920×1080 @ 60fps 4032×3040 @ 30fps
Interface	2-lane MIPI CSI2
Default Lens Mount	M12 Mount (SKU: LN053)
Dimension	24mm×25mm

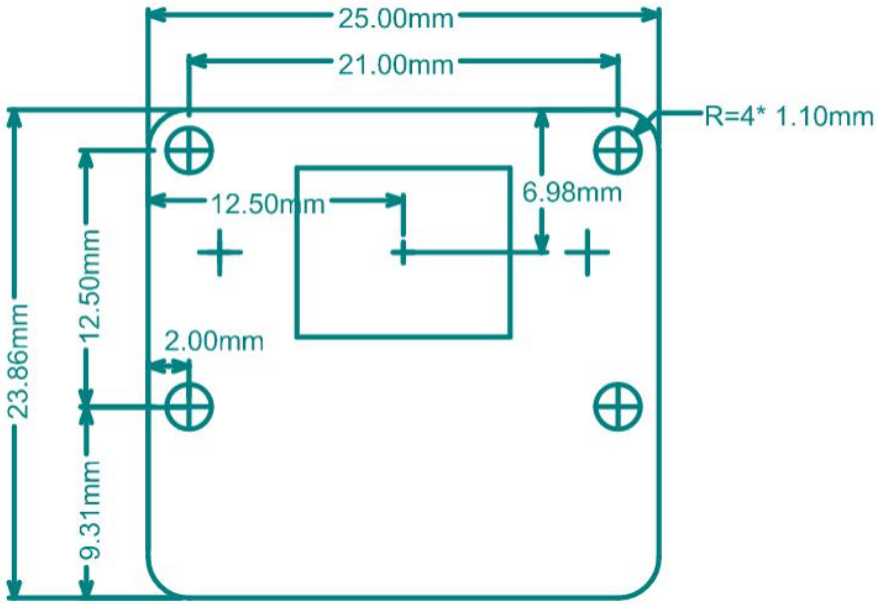
4. Package Contents

- 1 pcs 12.3MP IMX477 color camera module
- 1 pcs 3.9mm focal length M12 mount camera lens
- 1 pcs 150mm/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

ArduCam®
Model No:M23390H08

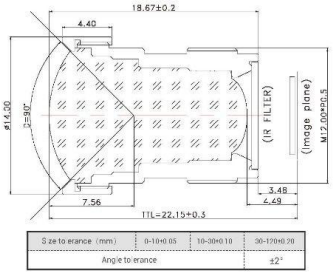
LENS SPECIFICATIONS

Optical Format	1/2.3"
EFL(mm)	3.9
35mm EFL *	21
BFL(mm)	4.49
Construction	6G+IR
F/NO	2.8
FOV (D/H/V) @ 1/2.3"	90/75/60

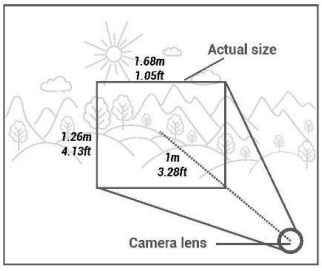
* 35mm Equivalent Focal Length for 1/4" Arduino or RPI Camera

Lens Holder Height	13mm
IR filter	650 IR filter
Mount	M12
Working Wavelength	400-700nm
MOD	0.3m
Size(mm)	14 x 18.67
Weight	5g
HFOV on 1/4" RPi Cam	50°

MECHANICAL DRAWING



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