

ArduCam



Datasheet

13MP IMX258 USB3.0 Camera Module

B0485

CONTENT

1. Overview
2. Disclaimer
3. Technical Parameters
4. Camera Dimension Diagrams
5. Camera Parameters Interface
6. Operating Condition
7. Contact Us

Version	Compile	Auditing	Authorize	DATE
V1.0	Bin L	Kai Z	Lee J	27.11.2023

1. Overview

The Arducam USB 3.0 includes a diverse range of camera modules, each tailored to specific use cases and requirements. This datasheet will detail the specifications and features of each individual product for user reference, allowing you to make informed decisions about which camera module best suits your project.

2. Disclaimer

While we have made every effort to ensure the accuracy and completeness of the information presented in this datasheet, Arducam reserves the right to make changes to product specifications, features, and documentation without notice. All information provided in this datasheet is subject to change and should be considered for reference purposes only.

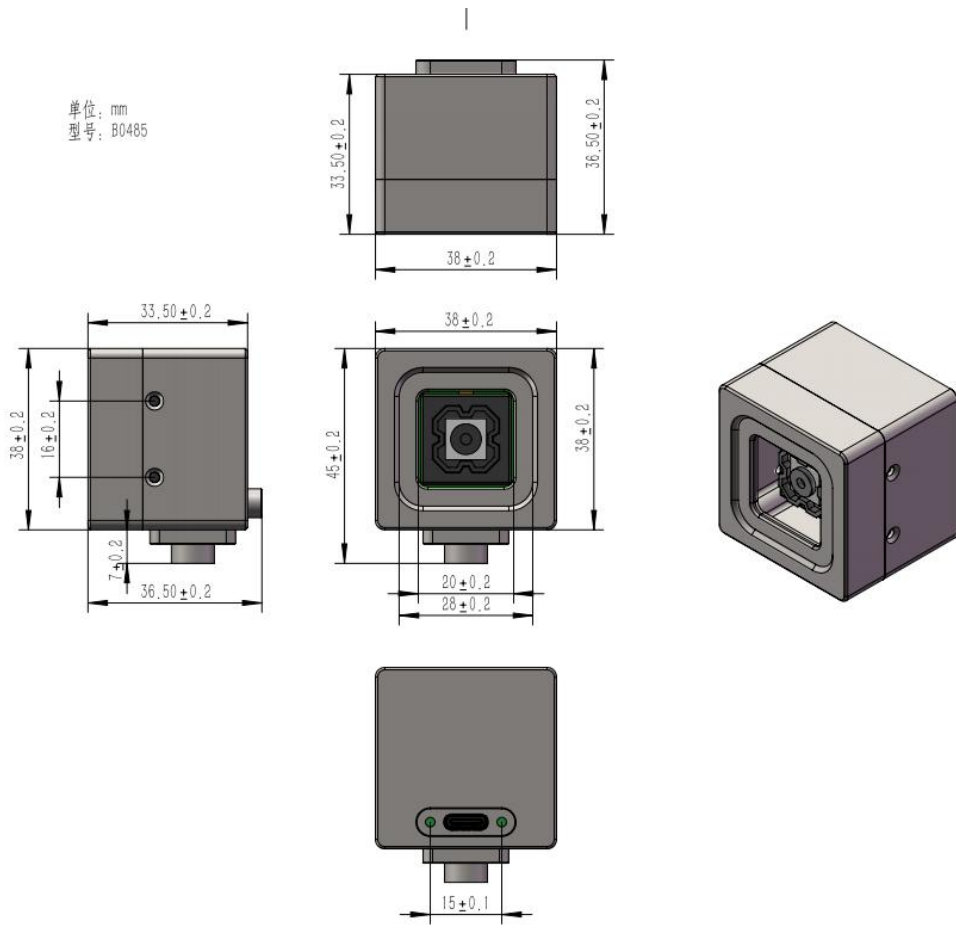
3. Technical Parameters

Image Sensor	
Sensor	IMX258
Resolution	13MP
Chroma	Color
Shutter Type	Rolling shutter
Optical Format	1/3.06"
Output Format	YUY2
Pixel Size	1.12 μ m x1.12 μ m
Sensor Active Area	4224(H) \times 3192(V)
Frame rate (USB 3.0)	1280 \times 720@60fps, 1920 \times 1080@40fps, 2096 \times 1560@30fps, 3840 \times 2160@20fps, 4208 \times 3120@12fps
Frame rate (USB 2.0)	1280 \times 720@10fps
Stabilizer Type	Optical Image Stabilization (OIS)
Stabilizer Dimensions	19.0*19.0*9.9 mm
Stabilizer Compensation Axis No.	2 (Pitch and Yaw)
Stabilizer Compensation Angle	$\leq \pm 4^\circ$
Stabilizer Compensation Ratio	≥ 21 dB
Stabilizer Resonant Frequency	TBD
Stabilizer Average Power	180mW
Lens	

Focus Type	Motorized Focus
FOV	123°(D)×112°(H)×96°(V)
Lens Mount	M6.5
F.NO	F2.4
E.F.L	2.35 mm
Default Focus Range	10cm- ∞
USB Interface	
Interface	USB 3.2 Gen 1 device, backward compatible with USB 2.0 hosts
Connector	Type-C reversible interface connector
UVC Compliant	No additional drivers required
Electrical and Mechanical	
Operating Voltage	DC 5V +/- 5%
Operating Temp.	32°F-158°F (0°C to 70°C)
Power Requirements	Max: 1.5W, Min: 0.81W
Camera Board Size	34×34 mm
Functionality and Compatibility	
Supported OS	Windows, Linux
Recommend Sample Application	PotPlayer for Windows, qv4l2 for Linux
UVC Controls	Brightness, Contrast, Saturation, White Balance (Auto/Manual), Gain, Focus (Manual), Exposure (Manual/Auto)

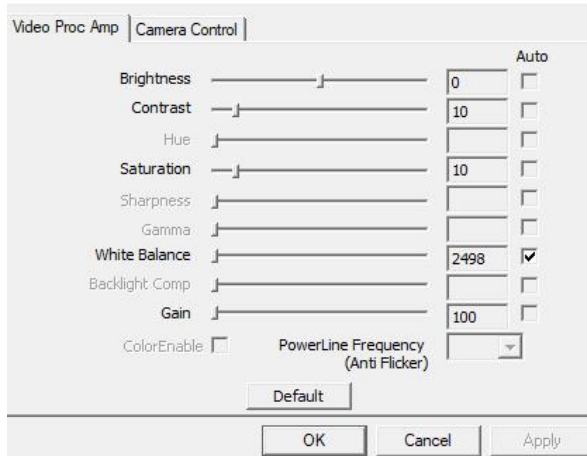
4. Camera Dimension Diagrams

Unit: mm

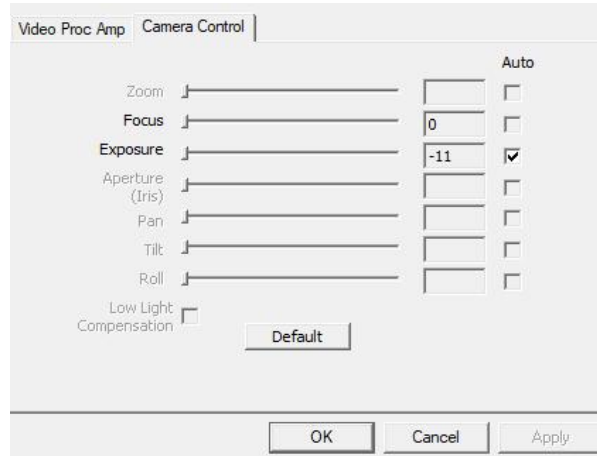


5. Camera Parameters Interface

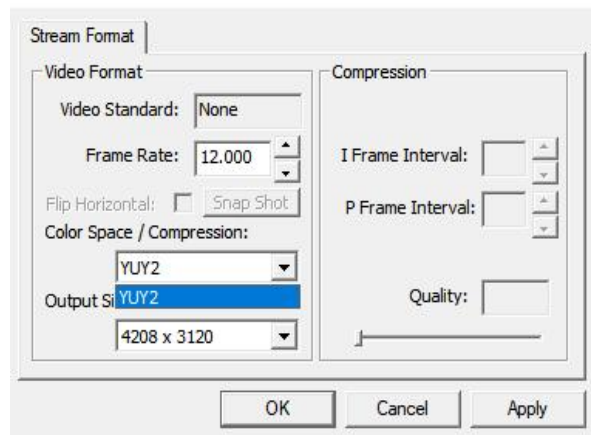
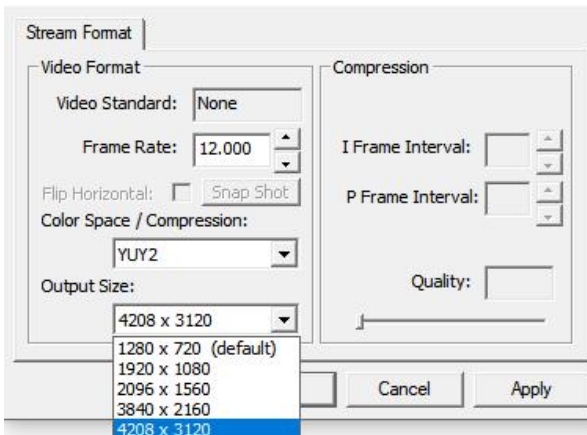
- Video Proc Amp



- Camera Control



- Video Capture Pin



6. Operating Condition

6.1 YUY2 with USB 3.0

The following table lists the power consumption of the B0485 YUY2 format with USB 3.0 devices.

Resolution	Max Frame Rate (fps)	Supply Voltage (V)	Typical Current (mA)	Power Consumption (W)
4208x3120	12	5	294	1.47
3840x2160	20	5	300	1.5
2096x1560	30	5	258	1.29
1920x1080	40	5	246	1.23
1280x720	60	5	230	1.15
Power at Idle Condition	/	5	96	0.48

6.2 YUY2 with USB 2.0

The following table lists the power consumption of the B0485 YUY2 format with USB 2.0 devices.

Resolution	Max Frame Rate (fps)	Supply Voltage (V)	Typical Current (mA)	Power Consumption (W)
1280x720	10fps	5	162	0.81
Power at Idle Condition	/	5	96	0.48

7. Contact Us

For any product-related questions, please feel free to contact us:

- Official website: www.arducam.com
- Contact form: <https://www.arducam.com/contact-arducam/>
- Tel: +1(319)471-7640