

Ardu*Cam*



Datasheet

16MP USB3.0 Camera Module

B0471

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Version	Compile	Auditing	Authorize	DATE
V1.0	Bin L	Kai Z	Lee J	17.08.2023

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.

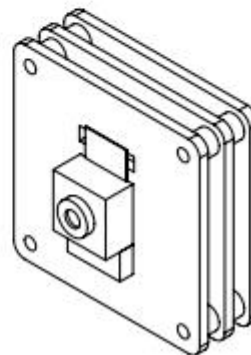
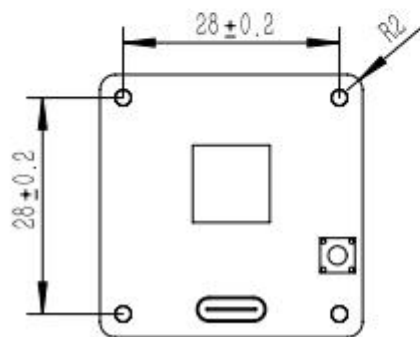
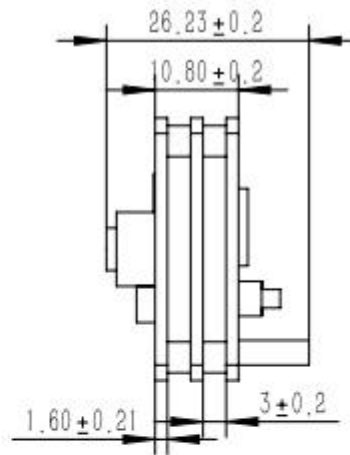
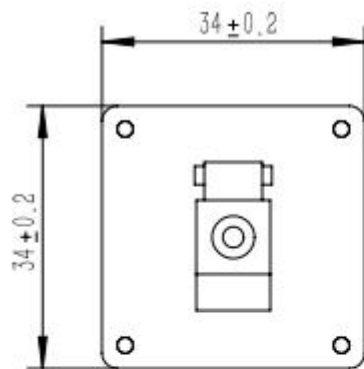
3. Technical Parameters

Image Sensor	
Sensor	IMX519
Resolution	16MP
Chroma	Color
Shutter Type	Rolling shutter
Optical Format	1/2.53"
Output Format	YUY2
Pixel Size	1.22um x 1.22um
Sensor Active Area	4656(H)×3496(V)
Frame rate (USB 3.0)	YUY2:1280*720@120fps, 1920*1080@60fps, 2320*1748@40fps, 3840*2160@20fps, 4656*3496@9fps
Frame rate (USB 2.0)	YUY2: 1280*720@10fps
Lens	
Focus Type	Motorized Focus
FOV	78°(D)×65°(H)×51°(V)
Lens Mount	Stock Lens
F.NO	F1.75
Focal Length	4.28mm
Default Focus Range	3m~∞
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: 1.48W, Min: 0.77W
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(Manual and Auto), Gain, Exposure(Manual and Auto), Focus(Manual)

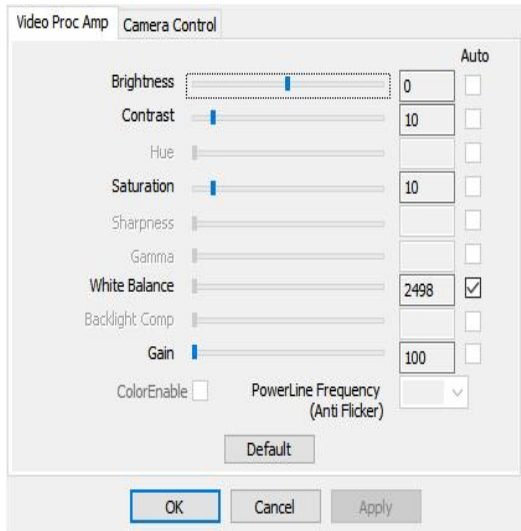
4. Camera Dimension Diagrams

Unit: mm

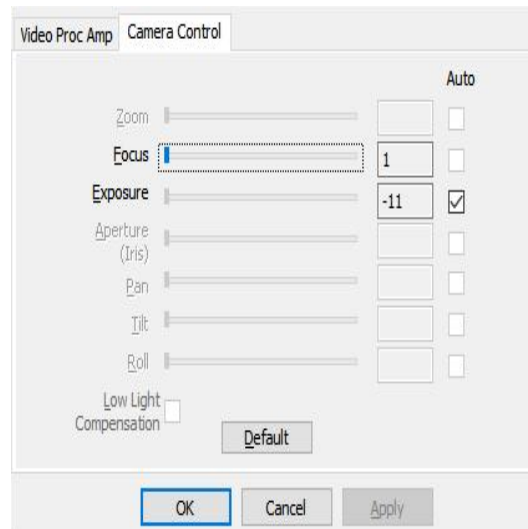


5. Camera Parameters Interface

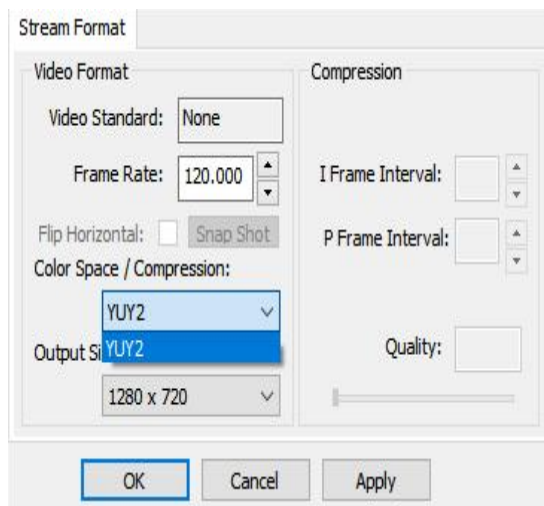
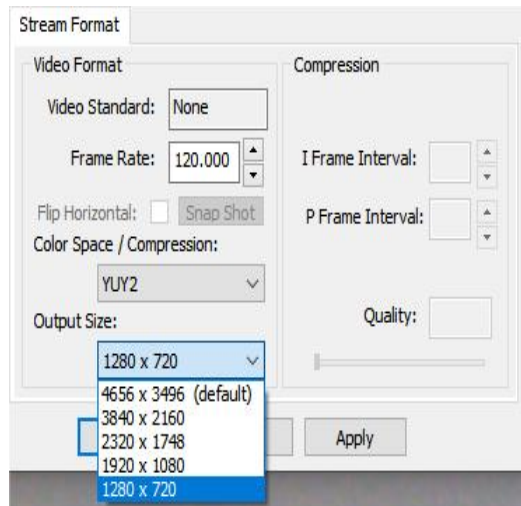
- Video Proc Amp



- Camera Control



- Video Capture Pin



6. Operating Condition

6.1 YUY2 with USB 3.0

The following table lists the power consumption of the B0471 YUY2 format with USB 3.0 devices.

Resolution	Max Frame Rate (fps)	Supply Voltage (V)	Typical Current (mA)	Power Consumption (W)
4656*3496	9fps	5	272	1.36
3840*2160	20fps	5	296	1.48
2320*1748	40fps	5	294	1.47
1920*1080	60fps	5	268	1.34
1280*720	120fps	5	254	1.27
Power at Idle Condition	/	5	86	0.43

6.2 YUY2 with USB 2.0

The following table lists the power consumption of the B0471 YUY2 format with USB 2.0 devices.

Resolution	Max Frame Rate (fps)	Supply Voltage (V)	Typical Current (mA)	Power Consumption (W)
1280*720	10fps	5	154	0.77
Power at Idle Condition	/	5	86	0.43

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