USB3.0 8M Camera Module IMX179

Key Properties

IMX179 Image Sensor
USB3.0 MJPEG/YUV2 Format
Frame Rate: 20fps for 8M(3264(H)x2448(V))
Max Frame Rate: 30fps for 1920(H)x1080(V)
S-mount M12 Lens Holder
Lenses Type -Standard: FL4.3mm
　　　　　　　-Optional: FL1.8/FL2.2/FL10/FL25
　　　　　　　-Autofocus Optional: FOV(H)77°/ FOV(H)115°

Application

Industrial Camera / Industrial AOI / High Resolution Photography
Digital Still Cameras / Biomedical Photography / Microscope Photo

Feature

- ◆ 8M(3264x2448) SOC image sensor IMX179
  - The IMX179 features an internal anti-shake engine for image stabilization is good for HD video, good image quality like conference or telepresence applications.
- ◆ M12 lenses of 1/3.2" 8M image optional
  - Standard: FL4.3mm FOV(D)68°
    Optional: FL1.8/FL2.2/FL10/FL25
    Autofocus Optional: FOV(H)77°/ FOV(H)115°
- ◆ MJPEG compressed format output support
- ◆ UVC support, plug and play for Windows and Linux

Introduction

CM8M30M12QU3 is an 8MP (3264×2448) USB camera board using the 1/3.2" IMX179 high-resolution image sensor, making it ideal for industrial high-resolution imaging and biomedical microscope photography applications. It adopts a USB 3.0 high-speed transmission interface, ensuring fast data transfer and smooth high-resolution image output. With its 8MP high resolution and full feature support, the CM8M30M12QU3 is an ideal and cost-effective solution for high-performance industrial cameras and high-resolution digital imaging systems. It features an S-mount (M12) lens holder, allowing users to select lenses and spectral filters according to their application requirements.

Specifications

Model	CM8M30M12QU3
Sensor	IMX179
Image Size	1/3.2 inch
Pixel Size	1.4 µm
Image Area	6.18 mm x 5.85 mm
Image Pixels & Resolution	8M / 3264(H) x 2448(V)
Image Formats	MJPEG / YUY2 (YUYV)
Image Transfer Rate	3264x2448 MJPEG@20fps / 2592x1944 MJPEG@20fps 2048x1536 MJPEG@20fps / 1920x1080 MJPEG@30fps 1600x1200 MJPEG@30fps / 1280x1024 MJPEG@30fps 3264x2448 YUY2@15fps / 2592x1944 YUY2@20fps 2048x1536 YUY2@20fps / 1920x1080 YUY2@30fps 1600x1200 YUY2@30fps / 1280x1024 YUY2@30fps
Max S/N Ratio	44dB
Max Dynamic Range	83dB
Sensitivity	700mV/lux-sec@550nm
Mini illumination	0.5 lux
Shutter Type	Electronic rolling shutter / Frame exposure
Connecting Port	USB3.0
Plug & Play	UVC(USB Video Class) Compliant support
Auto Exposure Control (AEC)	Support
Auto White Balance (AWB)	Support
Adjustable Parameters	Brightness, Contrast, Saturation, Hue, Sharpness, Gamma, Gain, White Balance, Backlight Contrast, Exposure
Lens Parameters	Standard: FL4.3mm Optional: FL1.8/FL2.2/FL10/FL25 Autofocus Optional: FOV(H)77°/ FOV(H)115°
Lens Holder	Standard M12 lens holder
LED Power	2P x2 support
Power Supply	USB BUS POWER
Operating Voltage	DC 5V
Operating Current	150mA ~ 240mA
Operating Temperature	-20 ~ 70°C
Storage Temperature	-20 ~ 85°C
PCBA Dimensions	38x38mm (Compatible 32x32mm）
Weight	~30g
Cable Length	Standard 0.5m, Optional 1.5m, 2m

Operating System Request	Win8/Win10/Win11
	Linux with UVC (above linux-2.6.26）
	MAC OSX EI captain10.11.4 or later
	Android 4.0 or above with UVC

Specifications are subject to change without notice.

Sensor Board Drawings