



8M Camera Module USB2.0 IMX415

Key Properties

IMX415 Image Sensor

USB2.0 MJPEG/YUV2 Format

Frame Rate: 30fps for 8M(3840(H)x2160(V))

Max Frame Rate: 30fps for 8M(3840(H)x2160(V))

S-mount M12 Lens Holder

Lenses Type -Standard: FL3.2mm Fixed Focus

-Optional: FL1.8/FL2.5/FL4.5/FL6.2/FL10.0

Autofocus Lens: FOV(H)90°, FOV(H)120°



Application

Mobile Camera / Portable Media / Entertainment

Digital Still Cameras / PC multimedia

Feature

- ◆ 8M(3840x2160) SOC image sensor IMX415
 - The IMX415 is 8MP CMOS image sensor featuring 4K resolution, a native 16:9 aspect ratio, high sensitivity, and low noise performance based on STARVIS technology.
- ◆ M12 lenses of 1/2.8" 8M image optional
 - Standard: FL3.2mm(HxV: 84° x 53°)
 - Optional: FL1.8(126° x 96°)/ FL2.5(117° x 87°)/ FL4.5(67° x 41°)/ FL10.0(32° x 17°)
 - Autofocus: FOV(H)90°, FOV(H)120°
- ◆ MJPEG compressed format output support
- ◆ UVC support, plug and play for Windows and Linux

Introduction

CM8M30M12Q2 is an 8MP (3840x2160) USB camera board featuring the IMX415 sensor. It offers high dynamic range (HDR), high sensitivity, and low noise performance based on STARVIS™ technology. With excellent light efficiency and a compact form factor, it is ideal for surveillance cameras, automotive systems, and machine vision applications.



Specifications

Model	CM8M30M12Q2
Sensor	IMX415
Image Size	1/2.8 inch
Pixel Size	1.45 μm
Image Area	6287 μm x 3534 μm
Image Pixels & Resolution	8M / 3840(H) X 2160(V)
Image Formats	MJPEG / YUV2 (YUYV)
Image Transfer Rate	3840X2160 MJPEG@30fps / 2592X1944 MJPEG@30fps 2688X1512 MJPEG@30fps / 2048X1536 MJPEG@30fps 1920X1080 MJPEG@30fps / 1600X1200 MJPEG@30fps 1280X1024 MJPEG@30fps / 640x480 MJPEG@30fps 3840x2160 YUY2@1fps / 2592x1944 YUY2@1fps 2688x1512 YUY2@1fps / 2048x1536 YUY2@5fps 1920x1080 YUY2@5fps / 1600x1200 YUY2@5fps 1280x1024 YUY2@5fps / 640x480 YUY2@30fps
Max S/N Ratio	72dB
Sensitivity	0.65V/lux-sec@550nm
Mini illumination	0.01 lux
Shutter Type	Electronic rolling shutter / Frame exposure
Connecting Port	USB2.0 High Speed
Plug & Play	UVC(USB Video Class) Compliant support
Auto Exposure Control (AEC)	Support
Auto Exposure Bracketing (AEB)	Support
Auto Gain Control (AGC)	Support
Adjustable Parameters	Brightness, Contrast, Saturation, Hue, Sharpness, Gamma, Gain, White Balance, Backlight Contrast, Exposure
Lens Parameters	Standard: FL3.2mm Optional: FL1.8/FL2.5/FL4.5/FL6.2/FL10.0 Autofocus: AF FOV(H)90°, FOV(H)120°
Lens Holder	Standard M12 lens holder
Power Supply	USB BUS POWER 5P-1.0mm Socket
Operating Voltage	DC 5V
Operating Current	236mA
Operating Temperature	-20°C ~ 70°C
Storage Temperature	-20°C ~ 80°C
PCBA Dimensions	38x38mm (Compatible 32x32mm)
Weight	~30g
Cable Length	Standard 1m, Optional 2m, 3m, 5M



Operating System Request	WinXP/Vista/Win7/Win8/Win10/Win11 Linux with UVC (above 2.6.26) MAC-OS X 10.4.8 or later Android 4.0 or above with UVC
--------------------------	---

Specifications are subject to change without notice.

