



8M Starlight Low-Light USB3.0 Camera Module

Key Properties

IMX585 Image Sensor

USB3.0 USB2.0 MJPEG/YUYV/NV12/H.264/H.265 Format

Frame Rate: 60fps for 8M(3840(H)x2160(V))

Max Frame Rate: 60fps for 8M(3840(H)x2160(V))

M22 Lens Holder

Lenses Type -Standard: FL4.0 mm Fixed Focus

-Optional: FL2.8 / FL6.0 mm Fixed Focus



Application

Ultra-Low Light / High Sensitivity / Smart Surveillance

Industrial Vision / Intelligent Cameras

Feature

- ◆ 8M(3840x2160) IMX585 CMOS Image Sensor
 - IMX585 is designed for high-resolution industrial and professional imaging applications, enabling smart vision systems with excellent low-light performance and HDR capability.
- ◆ M22×0.5 Thread Lens Type of 1/1.2" 8M image optional
 - Standard: FL4.0mm(HxV: 88° x 48°)
 - Optional: FL2.8mm (102° x 53°) / FL6.0mm (56° x 31°)
- ◆ MJPEG compressed format output support
- ◆ UVC support, plug and play for Windows and Linux

Introduction

CM8M60CQ is an 8MP (3840x2160) USB camera board featuring the IMX585 sensor. It delivers high dynamic range (HDR), ultra-low-light sensitivity, and low noise performance with STARVIS™ technology. Featuring excellent light efficiency and a compact design, it is ideal for smart surveillance cameras, robotics and automation systems, and industrial vision applications.



Specifications

Model	CM8M60CQ
Sensor	IMX585
Image Size	1/1.2 inch
Pixel Size	2.9 μm
Image Area	11136 μm $\times$ 6264 μm
Image Pixels & Resolution	8M / 3840(H) X 2160(V)
Image Formats	MJPEG/YUYV/NV12/H.264/H.265
Image Transfer Rate	3840X2160 MJPEG@60fps / 3264X2448 MJPEG@60fps 2592X1944 MJPEG@60fps / 2560X1440 MJPEG@60fps 2048X1536 MJPEG@60fps / 1600X1200 MJPEG@60fps 1920X1080 MJPEG@60fps / 1280X720 MJPEG@60fps 640X480 MJPEG@60fps 3840X2160 YUYV@18fps / 3264X2448 YUYV@30fps 2592X1944 YUYV@30fps / 2560X1440 YUYV@30fps 2048X1536 YUYV@30fps / 1600X1200 YUYV@30fps 1920X1080 YUYV@30fps / 1280X720 YUYV@30fps 640X480 YUYV@30fps 3840X2160 NV12@18fps / 3264X2448 NV12@30fps 2592X1944 NV12@30fps / 2560X1440 NV12@30fps 2048X1536 NV12@30fps / 1600X1200 NV12@30fps 1920X1080 NV12@30fps / 1280X720 NV12@30fps 640X480 NV12@30fps 3840X2160 H.264@60fps / 3264X2448 H.264@60fps 2592X1944 H.264@60fps / 2560X1440 H.264@60fps 2048X1536 H.264@60fps / 1600X1200 H.264@60fps 1920X1080 H.264@60fps / 1280X720 H.264@60fps 640X480 H.264@60fps 3840X2160 H.265@60fps / 3264X2448 H.265@60fps 2592X1944 H.265@60fps / 2560X1440 H.265@60fps 2048X1536 H.265@60fps / 1600X1200 H.265@60fps 1920X1080 H.265@60fps / 1280X720 H.265@60fps 640X480 H.265@60fps
Max S/N Ratio	45–46 dB
Sensitivity	7900 Digit (standard, F5.6)
Mini illumination	0.0001 lux
Shutter Type	Electronic rolling shutter / Frame exposure
Connecting Port	USB3.0 High Speed USB2.0(Frame rate be reduced)
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: FL4.0mm(HxV: 88° x 48°) Optional: FL2.8mm (102° x 53°) / FL6.0mm (56° x 31°)
Lens Holder	Standard M22×0.5 Thread Lens Type
Power Supply	USB Type-C +5V Supply
Operating Voltage	DC 5V
Operating Current	606mA
Operating Temperature	-10°C ~ 60°C
Storage Temperature	-20°C ~ 85°C
Module Size	38×38×84.2 mm
Weight	~90g
Cable Length	Standard 1.5m, 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.

