2M Camera Sensor Module USB2.0 OG02B10

Key Properties

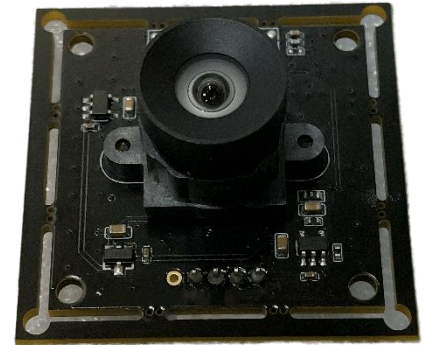OG02B10 Image Sensor

MJPEG Format

Frame Rate: 60fps for 1600 (H)x 1200 (V)

S-mount M12 Lens Holder

Lenses Type -Standard: H 54°, V 42°

Application

Portable Media / Robot Vision Camera/ Image Recognition

Laser Sensing / DIY Camera Solutions / Action Photography

Feature

- ◆ 2M(1600x1200) image sensor OG02B10
  - - Low illumination and high dynamic range sensor
- ◆ Megapixel M12 lenses optional
- ◆ MJPEG compressed format output support
- ◆ UVC support, plug and play for Windows and Linux
- ◆ Global shutter support

Introduction

CM2M60M12G is a 2MP (1600x1200) USB camera sensor module using 1/2.9" OG02B10 designed for global shutter and high dynamic range scene performance. CM2M60M12G is an ideal solution of small USB camera module for global shutter and high dynamic range applications like action photography and face recognition. It has S-mount (M12) lens holder for enabling the users to choose the lens and any spectral filter as per their requirements. It is a Plug-and-Play camera (UVC compliant) for Windows, Linux.

Specifications

Model	CM2M60M12G
Sensor	OG02B10
Image Size	1/2.9 inch
Pixel Size	3 μm
Image Area	4857 μm x 3956 μm
Image Pixels & Resolution	1600(H) x 1200(V)
Image Formats	MJPEG / YUV (RGB/BW)
Image Transfer Rate	1600x1200 MJPEG@60fps 1280x720 MJPEG@60fps 960x720 MJPEG@60fps 640x480 MJPEG@60fps 1600x1200 YUV@5fps 1280x720 YUV@10fps 960x720 YUV@10fps 640x480 YUV@30fps
Max S/N Ratio	37.4dB
Dynamic Range	68dB
Sensitivity	$114\mathrm{K}e^-/(\mu W.cm^{-2}.\sec)@850nm$
Shutter Type	Electronic global shutter
Connecting Port	USB2.0 High Speed
OTG Protocol	USB2.0 OTG
Plug & Play	UVC(USB Video Class) Compliant support
Auto Exposure Control (AEC)	Support
Auto White Balance (AWB)	Support
Adjustable Parameters	Brightness, Contrast, Saturation, Sharpness, Gamma, White Balance, Backlight Contrast, Exposure
Lens Parameters	Standard: H 54°, V 42°
Lens Holder	Standard M12 lens holder
Power Supply	USB BUS POWER
Operating Voltage	DC 5V
Operating Current	200mA
Operating Temperature	Operation :-30° ~ 70°C Stable image :0° ~ 50°C
Storage Temperature	-30 ~ 70°C
PCBA Dimensions	38mm x 38mm *1.6mm+0.3mm
Weight	~30g

Operating System Request	Win7/Win8/Win10/Win11 (no SDK)
	Linux 2.6 or above (SDK support)
	Android 4.0 or above (SDK support)

Specifications are subject to change without notice.

Sensor Board Drawings