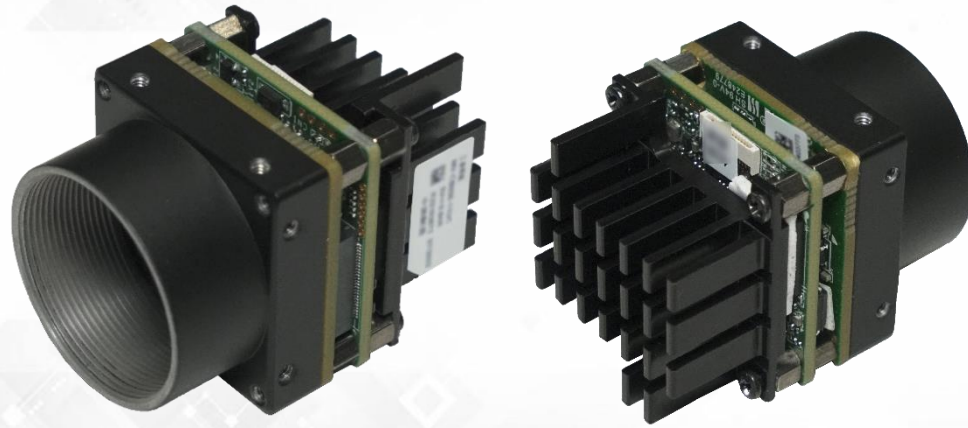# MV-CB050-11UC-C

5.0 MP 2/3" CMOS USB3.0 Board Level Camera

GEN<i>CAM

US3 VISION

Introduction

MV-CB050-11UC-C camera adopts Sony® IMX264 sensor to provide high-quality images. It uses USB3.0 interface to transmit non-compressed images in real time, and its max. frame rate can reach 60 fps in full resolution. With compact design and USB3.0 transmission via high-speed FPC connector, the camera can meet different spatial requirements.

Key Feature

- USB3.0 supports FPC connection to meet limited spatial requirements.
- Supports senor and mainboard separation for complex spatial requirements.
- Supports auto or manual adjustment for gain, exposure time, white balance, LUT, Gamma correction, etc.
- Adopts image interpolation algorithm for color reproduction.
- Compatible with USB3 Vision Protocol, GenICam Standard, and third-party software based on protocol and standard.
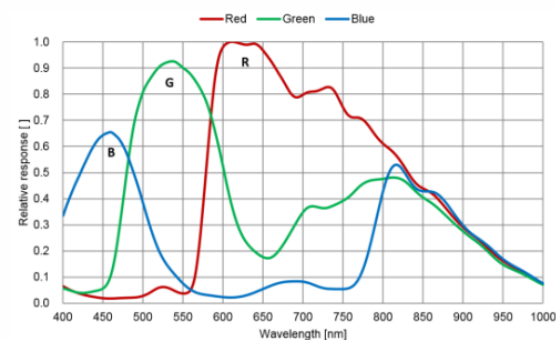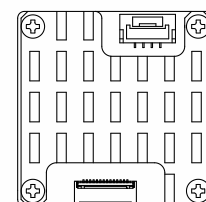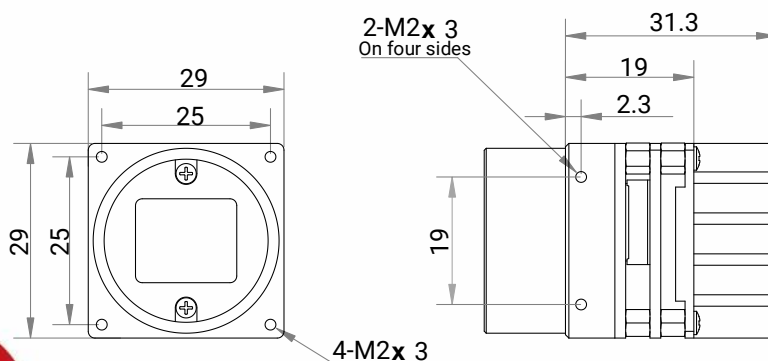
Available Model

MV-CB050-11UC-C

Applicable Industry

3D application, semiconductor, etc.

Sensor Quantum Efficiency

Dimension

Unit: mm

Specification

Model	MV-CB050-11UC-C
Performance	
Sensor type	CMOS, global shutter
Sensor model	Sony® IMX264
Pixel size	3.45 µm × 3.45 µm
Sensor size	2/3"
Resolution	2448 × 2048
Max. frame rate	60 fps @2448 × 2048
Dynamic range	72 dB
SNR	40.2 dB
Gain	0 dB to 24 dB
Exposure time	UltraShort exposure mode: 1 µs to 14 µs
	Standard exposure mode: 15 µs to 10 sec
Exposure mode	Off/Once/Continuous exposure mode
Mono/color	Color
Pixel format	Mono 8/10/12, Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed, YUV422_YUYV_Packed, RGB 8, BGR 8
Binning	Supports 1 × 1, 2 × 2, 4 × 4
Decimation	Supports 1 × 1, 2 × 2
Reverse image	Supports horizontal and vertical reverse image output
Electrical feature	
Data interface	USB3.0, compatible with USB2.0
Digital I/O	Bi-directional non-isolated I/O × 2 (Line 2, Line 5)
Power supply	5 VDC (USB3.0 provides power supply)
Power consumption	Typ. 2.8 W @5 VDC (USB3.0 provides power supply)
Mechanical	
Lens mount	C-Mount
Dimension	29 mm × 29 mm × 31.3 mm (1.1" × 1.1" × 1.2")
Weight	Approx. 37 g (0.08 lb.)
Temperature	Working temperature: 0 °C to 50 °C (32 °F to 122 °F)
	Storage temperature: -30 °C to 70 °C (-22 °F to 158 °F)
Humidity	20% to 80% RH, non-condensing
General	
Client software	MVS or third-party software meeting with USB3 Vision Protocol
Operating system	32/64-bit Windows XP/7/10 and 32/64-bit Linux
Compatibility	USB3 Vision, GenICam
Certifications	CE, FCC, RoHS, KC

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