



2M Slender Camera Module USB2.0 HM2057

Key Properties

HM2057 Image Sensor

MJPEG/YUV2 Format

Frame Rate: 30fps for 1280x720 MJPG

Max Resolution: 1600x1200 for YUY2 (YUYV)

S-mount M7 Lens Holder

Lenses Type: Fixed Focus FL1.5mm(100°) / FL1.0mm(120°)



Application

Portable Media / Robot Vision Camera/ Image Recognition

Laser Sensing / DIY Camera Solutions

Feature

- ◆ 2M(1600x1200) image sensor HM2057
 - Low illumination and high dynamic range sensor
- ◆ Megapixel M7 lenses optional
 - FL1.5mm M7 Camera Lens Module(100°)
 - FL1.0mm M7 Camera Lens Module(120°)
- ◆ MJPEG compressed format output support
- ◆ UVC support, plug and play for Windows and Linux



Introduction

CM2M30M7L is a 2MP(1600x1200) USB camera board using 1/5" HM2057 designed for both low light and high dynamic range scene performance. CM2M30M7L is an ideal solution of small USB camera module for low light and high dynamic range applications like back lighting image and face recognition. It has S-mount (M7)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.

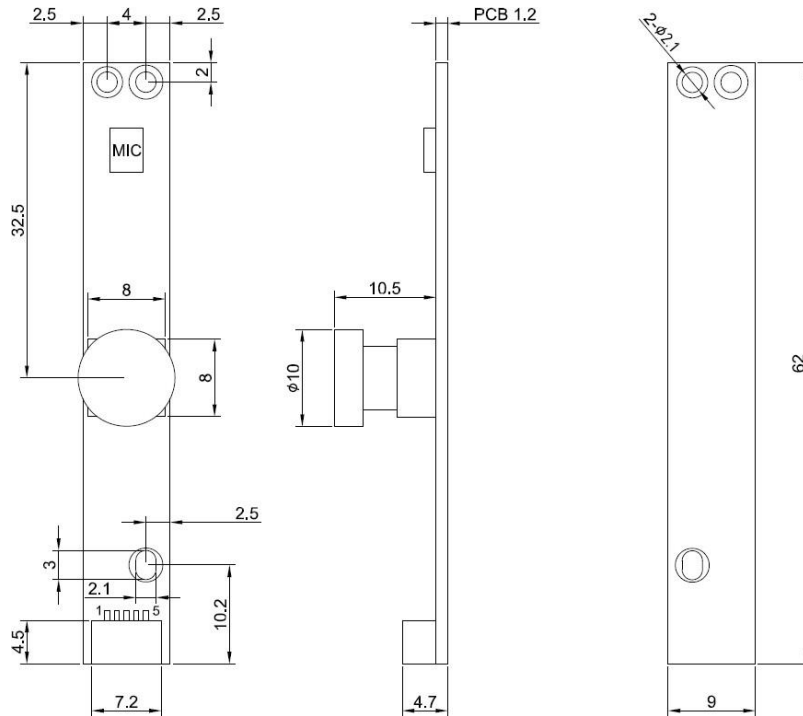


Specifications

Model	CM2M30M7L
Sensor	HM2057
Image Size	1/5 inch
Pixel Size	1.75 μm
Image Area	3835 μm x 2135 μm
Image Pixels & Resolution	2M / 1600(H) x 1200(V)
Image Formats	MJPEG / YUV2 (YUYV)
Image Transfer Rate	160x120 MJPG @30fps 320x240 MJPG @30fps / YUY2 @25fps 352x288 MJPG @30fps / YUY2 @25fps 640x480 MJPG @30fps / YUY2 @25fps 800x600 MJPG @30fps 1280x720 MJPG @30fps / YUY2 @10fps 1280x1024 MJPG @12fps / YUY2 @5fps 1600x1200 YUY2 @5fps
Max S/N Ratio	36dB
Dynamic Range	70dB
Sensitivity	600mV/lux-sec
Mini illumination	0.1 lux
Shutter Type	Electronic rolling shutter
Connecting Port	USB2.0 High Speed
OTG Protocol	USB2.0 OTG
Plug & Play	UVC(USB Video Class) Compliant support
Auto White Balance (AWB)	Support
Adjustable Parameters	Brightness, Contrast, Hue, Saturation, Sharpness, Gamma, Gain, Exposure
Lens Parameters	Standard: FL1.5mm M7 Camera Lens Module(100°) Optional: FL1.0mm M7 Camera Lens Module(120°)
Lens Holder	S-mount M7 Camera Lens Holder
Power Supply	USB BUS POWER 5P-1.0mm Socket
Operating Voltage	DC 5V
Operating Current	100mA ~ 130mA
Operating Temperature	-20 ~ 70°C
Storage Temperature	-40 ~ 85°C
PCBA Dimensions	8mm x 60mm
Weight	~30g
Operating System Request	WinXP/Win7/Win8/Win10/Win11 Linux 2.6 or above/Android 4.0 or above/IOS



Sensor Board Drawings



Note:

1. Sensor : HM2057

2. Image direction register use default settings

PIN	SIGNAL
1	VDD
2	D-
3	D+
4	GND
5	WELD
	GROUND

Specifications are subject to change without notice.

