Unit: ± 0.2 mm

Feature

- Global shutter.
- Outstanding quality.
- VGA image pixel.

Global Shutter

NEW PRODUCT ANNOUNCEMENT
Product appearance may be changed.
Final product appearance will be updated on datasheet.

Specification

Model No.	B124M3 (OG0TC1B)
CRA	30.84°
Dimensions (mm)	Ø 3
Orientation	Front View
Camera Type	Board Type
Video Format	MJPEG
Image Sensor	1/14.46" B/W CMOS Camera Module
Resolution	400 x 400 @ 240 fps; 200 x 200 @ 480 fps
Pixel Size (um)	2.2 × 2.2
Image Area (mm)	0.88 × 0.88
Sensitivity (Lux.Sec)	4100 mV / (Lux.sec) @ 530 nm, 24600 mV / (μW.cm^{-2}.sec) @ 850 nm
Dynamic Range	70.4 dB
S/N Ratio	39.4 dB
Scan Mode	Progressive
Shutter	Global
Lens	Please Check Model Information Table
View Angle	Please Check Model Information Table
Focus Distance (mm)	Infinity
LED	N/A (Optional)
Storage Temp.	-30 to 60 Degree C
Working Temp.	-10 to 60 Degree C
Interface	MIPI / USB 3.0
Power Supply	DC 3.3 V / DC 5 V
Power Current	160 mA (Max.)
Microphone	N/A (External Optional)
Operation System	Win XP, Win Vista, Win 7, Win 8, Win 10 Linux, MAC OSX

* Working temperature means the camera device, not environment temperature.

B124M3 (No Lens)



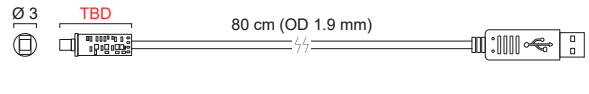
124M3

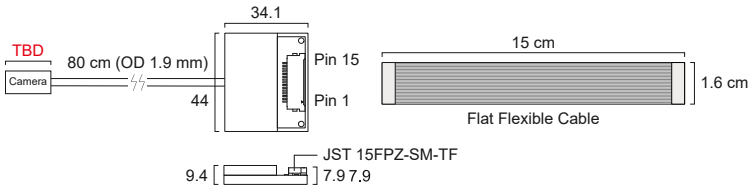


▲ YD-B124M3-45

Coming Soon

▲ XR-B124M3ZR9-71

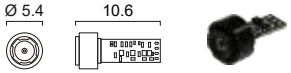




B124M3-45 (45°)



B124M3-66 (66°)



B124M3ZR9-71 (71°)

Coming Soon

Unit: ± 0.2 mm

Global Shutter



Means that all pixels of the array are exposed simultaneously.

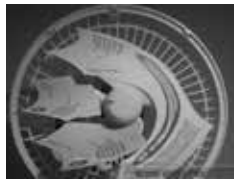
Advantage

- No Distortion of straight lines with fast-moving subjects
- No limit on flash sync speed

Disadvantage

- More noise levels
- Lower frame rates
- Lower dynamic range

Rolling Shutter



Means that adjacent rows of the array are exposed at slightly different times as the readout 'waves' sweep through each half of the sensor.

Advantage

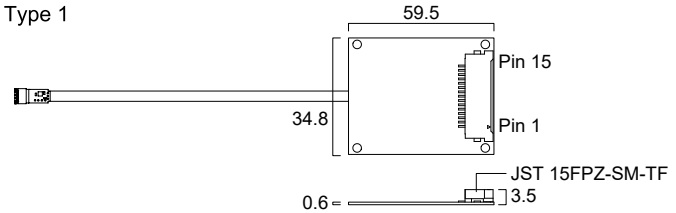
- Lower noise levels
- Higher frame rates
- Higher dynamic range

Disadvantage

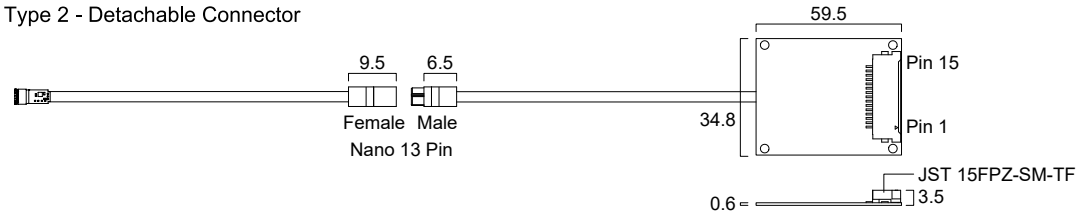
- Artifacts wit fast-moving subjects
- Limited flash sync speeds

Raspberry Pi (RPi) / MIPI CSI-2 (Available for X Series Only)

Type 1

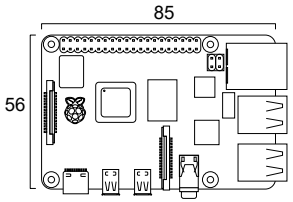


Type 2 - Detachable Connector

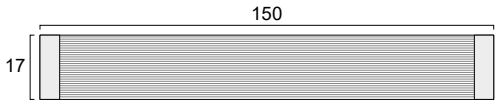


Type 3 - Wires Out





RPi Driver
(sold separate)



Flat Flexible Cable

PIN	NAME	DESCRIPTION	PIN	NAME	DESCRIPTION
1	GND	Ground	9	MCP	MIPI clock positive output
2	MDN0	MIPI data negative output	10	GND	Ground
3	MDP0	MIPI data positive output	11	RST	Reset and power down (active low)
4	GND	Ground	12	MCLK	System clock input
5	MDN1	MIPI data negative output	13	SCL	Serial interface clock
6	MDP1	MIPI data positive output	14	SDA	Serial interface data
7	GND	Ground	15	+3.3V	Power supply +3.3V
8	MCN	MIPI clock negative output			

Unit: ± 0.2 mm

XR-B124M3-88

SERIES	CONNECTOR	CAMERA BODY	DISPLAY			MICROPHONE	LED	LENS		
USB 3.0	UVC (USB)	Front View	Color	B/W	Dimensions			Code	Specification	View Angle
(F)Y Low Temp.	D Type A	(V)B Board Type	-	124M3	Ø 3	N/A None	N/A None	45	1.49 mm / F 3.2	45°
MIPI	T Type C	T Tube Type				A External	White	66	0.94 mm / F 4.5	66°
(F)X Low Temp.	E TE Industrial Mini I/O Type II (2040008-2) (USB 2.0 Only)	V Tube Type					L Normal	71	0.87 mm / F 5.0	71°
	R Raspberry Pi / MIPI CSI-2 (X)						LH High-Intensity			
	P DVP pin define (X)						Infrared			
*F Snapshot and Freeze Frame		*V Dimmer Controller					L9 IR 940 nm			
							L8 IR 850 nm			

* IR 940nm or IR 850nm LED is suggested to choose B/W camera type.
* Camera with LED light source is suggested to use lens with larger F-Stop number.
* Camera appearance or other requirements are applicable for customization.