

VIZIONCAM-OV5640



- Color Models, up to 2 lanes MIPI CSI-2 interface.
- Support automatic exposure control (AEC), automatic white balance (AWB), color image controls such as saturation, hue, lens correction, defective pixel canceling.
- Solution with Image Signal Processing function, tie in UVC USB3.0 Type C connector.
- Enable to embed on the device with windows system.
- Support embedded machine vision application in Digital still cameras, Smart Camera, PC multimedia, Surveillance Camera.

Specifications

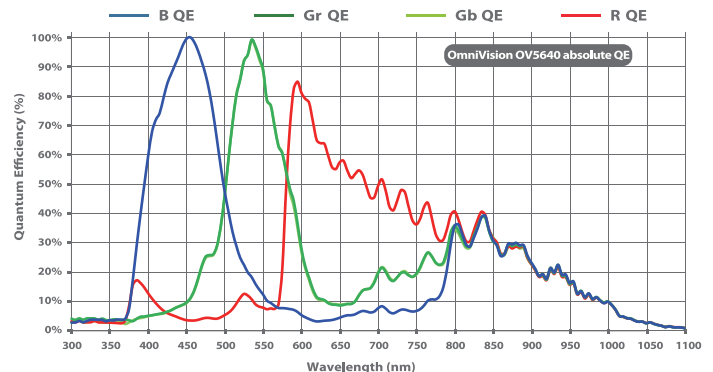
Sensor Information

CMOS Sensor	OmniVision OV5640
Active Pixels	2592 (H) x 1944 (V)
Pixel Size	1.4 μm x 1.4 μm
Optical Format	1/4"
Shutter Type	Rolling Shutter
Chromaticity	Color
Max Frame Rate	1080p: 30 fps 1280x960: 45 fps 720p: 60 fps QSXGA (2592x1944): 15 fps QVGA (320x240): 120 fps VGA (640x480): 90 fps
Chief Ray Angle	24°
Input Clock Range	6 - 27 MHz (Default 24MHz)
Bit Depths	8 / 10 bit
Color Format	YUV422, RAW8, RAW10

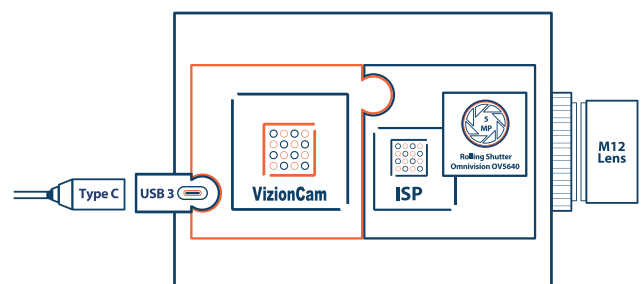
Interface

Data Transmission	MIPI CSI-2, up to 2 lanes
Communication Interface	I ² C
Connector	USB 3.0 Type C

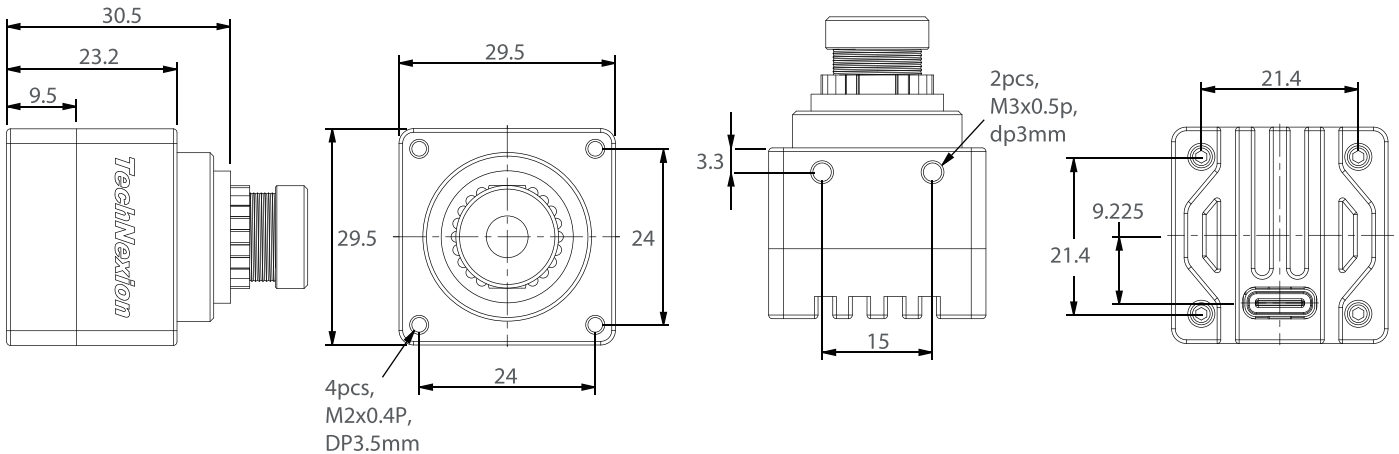
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Environmental and Mechanical

L x W x H	29.5 x 29.5 x 30.5 (Housing) mm
Mass	<50g
Operating Temperature	-30° ~ 70°C
Storage Temperature	-40° ~ 125°C
Ambient Humidity	10% to 90% RH

Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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Power

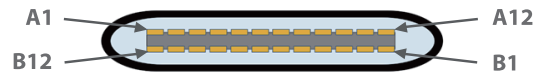
Supply Voltage	5V
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ISP Function

- Auto Exposure
- Auto Gain
- Gamma
- Auto White Balance (Color Model)
- Color Calibration

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Connector Pin Definition



A1	GND	B12	GND
A2	TXP1	B11	RXP1
A3	TXN1	B10	RXN1
A4	VBUS1	B9	VBUS3
A5	CC1	B8	SBU2
A6	DP1	B7	DN2
A7	DN1	B6	DP2
A8	SBU1	B5	CC2
A9	VBUS2	B4	VBUS4
A10	RXN2	B3	TXN2
A11	RXP2	B2	TXP2
A12	GND	B1	GND

Order Information

VIZIONCAM-OV5640

Holder / Frame	S Mount
Lens	Y

Lens Information

TEVSL06067030

Focus Length	6.0 mm
F/No.	2.0
FOV (Diagonal)	84°
TTL	23.5 mm
Range	30 cm to Infinity

*TechNexion could provide the suitable lens base on customer demand