

## VCI-AR0521-CB

- onsemi AR0521 5MP Rolling Shutter Sensor
- Designed for Low Light Applications
- C-Mount for Interchangeable Lenses
- UVC USB Type-C 5 Gbps Connector
- Plug & Play with Windows & Linux OS
- Comes with VizionViewer™ SDK



## Specifications

### Camera Information

CMOS Sensor	onsemi AR0521
Active Pixels	2592 (H) x 1944 (V) = 5MP
Pixel Size	2.2 $\mu\text{m}$ x 2.2 $\mu\text{m}$
Optical Format	1/2.5" (Diagonal 7.13 mm)
Shutter Type	Rolling Shutter
Chromaticity	Mono / Color
Illuminated type	Back Side Illuminated (BSI)
Maximum Frame Rate (MJPEG)	2592 x 1944 @ 60 fps 2560 x 1440 @ 60 fps 1920 x 1080 @ 60 fps 1280 x 960 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Maximum Frame Rate (UYVY)	2592 x 1944 @ 24 fps 2560 x 1440 @ 32 fps 1920 x 1080 @ 60 fps 1280 x 960 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Maximum S/N Ratio	40 dB
Output Format	UYVY MJPEG (JPG)

### Camera Interface

Connector	USB Type-C 5 Gbps
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### Power

Supply Voltage	5V $\pm$ 5%
Power Consumption	UYVY 2592 x 1944 @ 24 fps $\leq$ 1.2W
Standby Power	$\leq$ 0.1W Standby

### Software Support

Operation Systems	UVC Plug-and-play Windows 10/11 Linux Yocto
SDK	VizionViewer™ SDK

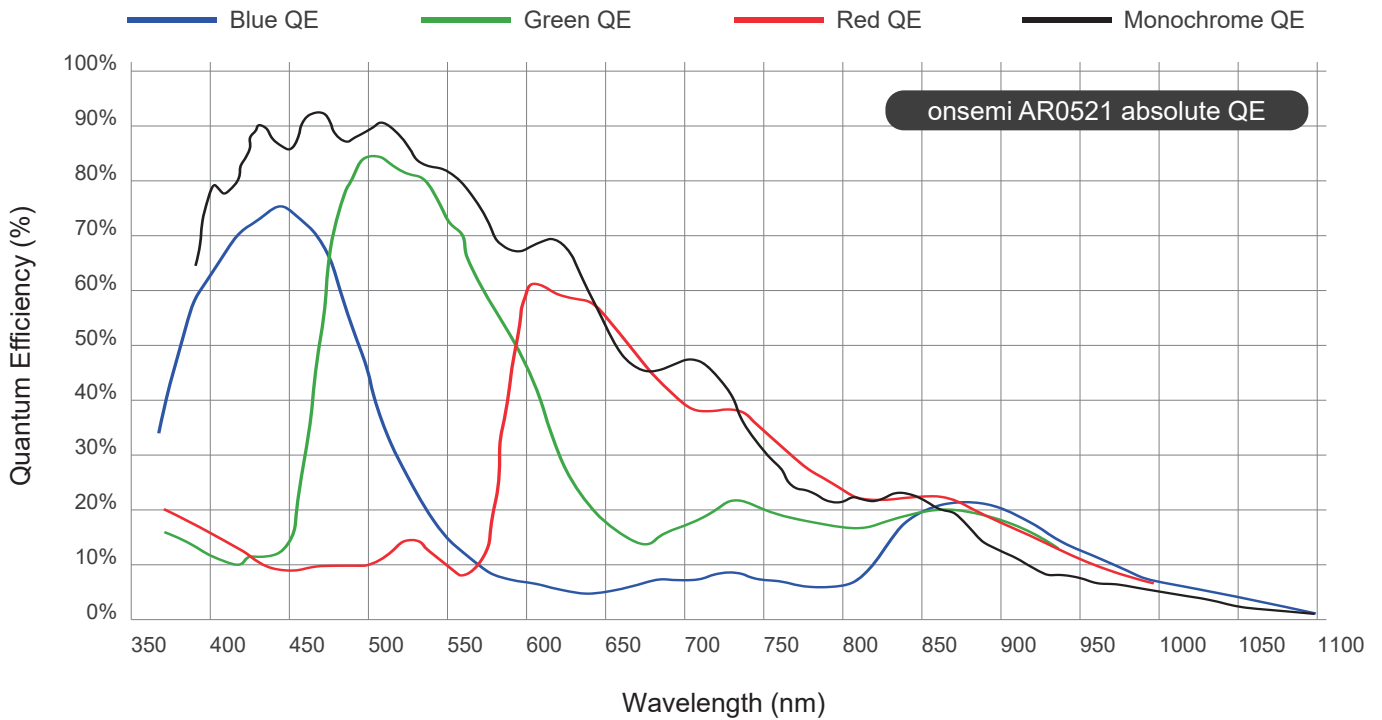
### Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 33.9(D) mm
Weight	39 grams
Relative Humidity	10 to 90 %
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Operating Temperature	-30°C to +70°C
Vibration	1 Grms random 5-500Hz hr/axis

### Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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## Spectral Characteristics

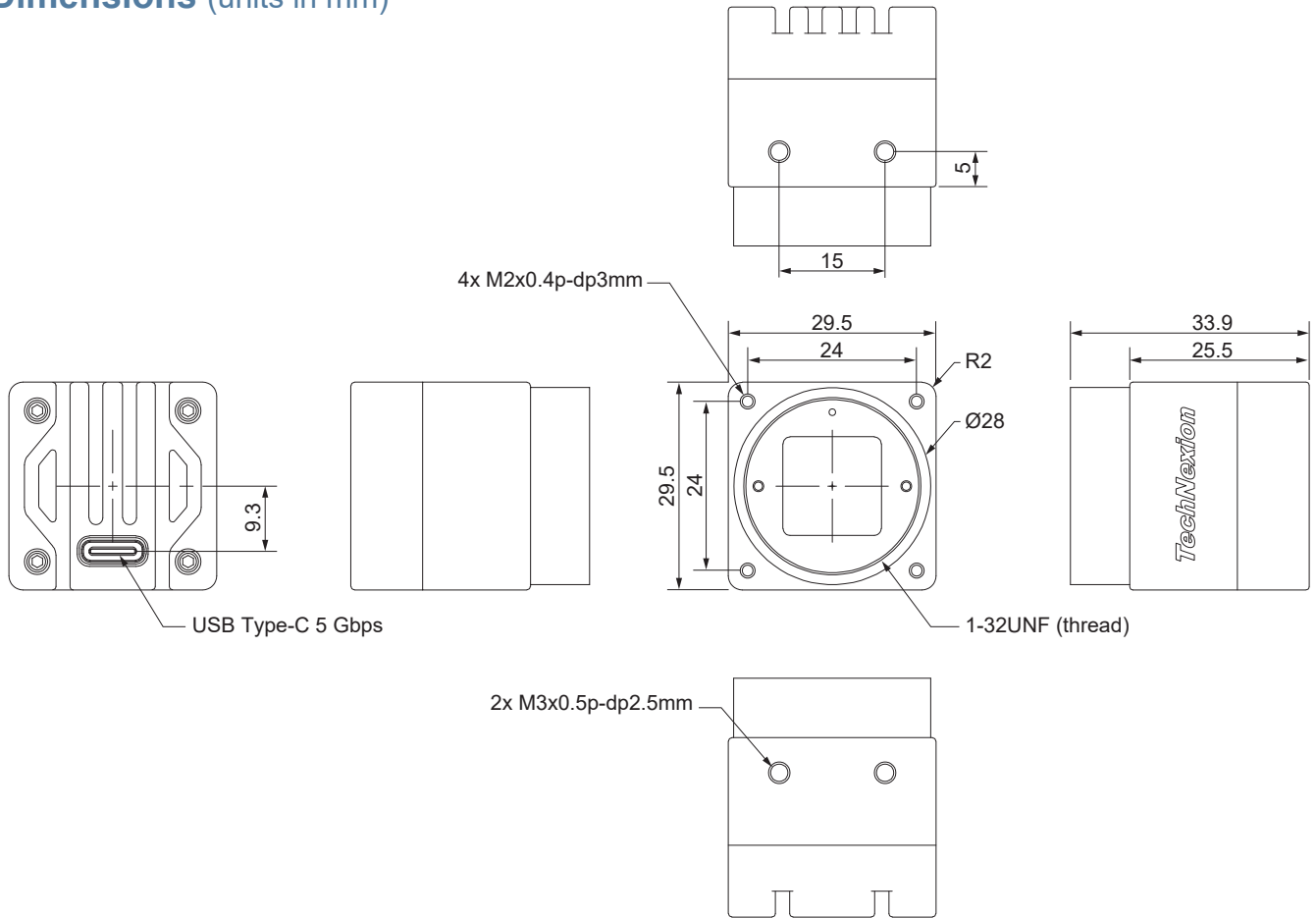


## Connector Pin Definition

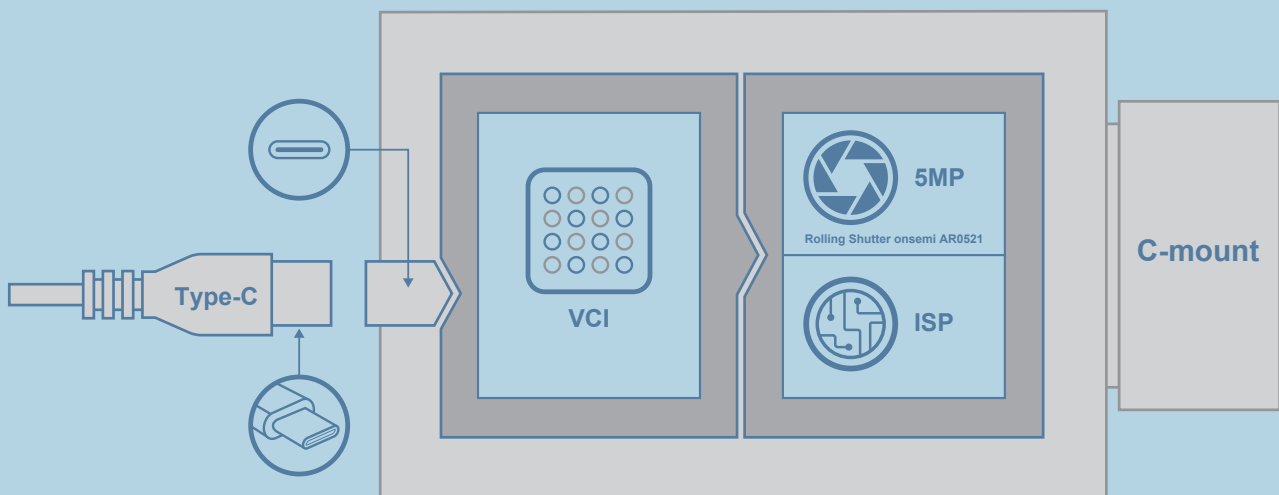


<b>A1</b>	GND	<b>B12</b>	GND
<b>A2</b>	TXP1	<b>B11</b>	RXP1
<b>A3</b>	TXN1	<b>B10</b>	RXN1
<b>A4</b>	VBUS1	<b>B9</b>	VBUS3
<b>A5</b>	CC1	<b>B8</b>	SBU2
<b>A6</b>	DP1	<b>B7</b>	DN2
<b>A7</b>	DN1	<b>B6</b>	DP2
<b>A8</b>	SBU1	<b>B5</b>	CC2
<b>A9</b>	VBUS2	<b>B4</b>	VBUS4
<b>A10</b>	RXN2	<b>B3</b>	TXN2
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

## Dimensions (units in mm)



## Block Diagram



## Order Information

VCI-AR0521-x-CB-xx

### Part Number Rules

Option	Code	Description
Chromaticity	C	Color
	M	Monochrome
Filter	-	-
	IR	IR Cut Filter 650nm

For further customization or questions about orders, contact your TechNexion sales representative.

### Optional Accessories

#### VCI-MOUNT-BRACKET-A

An easy to attach A-Mount bracket for TechNexion USB3 cameras.



VCI-MOUNT-BRACKET-A



VCI-MOUNT-BRACKET-A on tripod  
(tripod not included)

## Custom Lens Solutions



Our C-mount cameras can be paired with a variety of off-the-shelf lenses. Customers are welcome to choose their own, or alternatively our engineers are on standby to assist with selecting the right camera lens for different applications.

For more information. Please contact your TechNexion sales representative to start a discussion on how we can help you.