

# VIZIONCAM-AR0821



- High performance DR-Pix BSI pixel, up to 4 lanes MIPI CSI-2 interface.
- Fast full resolution video performance, 40 fps in 3-exposure HDR.
- 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 vision application in IoT, Security, Virtual/Augmented Reality, Scanning, Consumer Electronics.

## Specifications

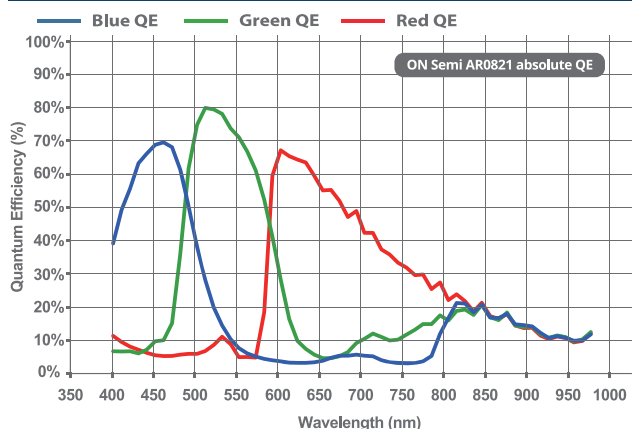
### Sensor Information

CMOS Sensor	ON Semi AR0821
Active Pixels	3848 (H) x 2168 (V)
Pixel Size	2.1 $\mu\text{m}$ x 2.1 $\mu\text{m}$
Optical Format	1/2" (Diagonal 9.25 mm)
Shutter Type	Rolling Shutter
Chromaticity	Color
Max Frame Rate	8Mp/3 exposure HDR: 40 fps 8Mp/4 exposure HDR: 30 fps
Chief Ray Angle	18°
Input Clock Range	10 - 48 MHz (Default 48MHz)
Bit Depths	8 / 10 / 12 bit
Color Format	YUV422, RGB888, RAW8, RAW10, RAW12

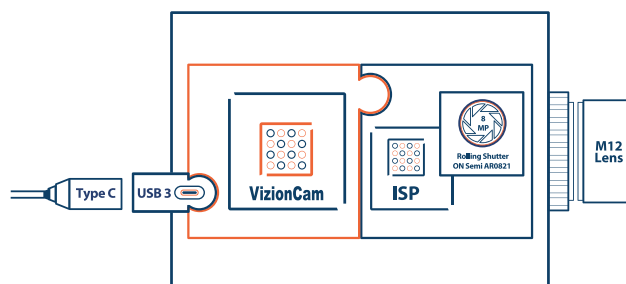
### Interface

Data Transmission	MIPI CSI-2, up to 4 lanes
Communication Interface	I <sup>2</sup> C
Connector	USB 3.0 Type C

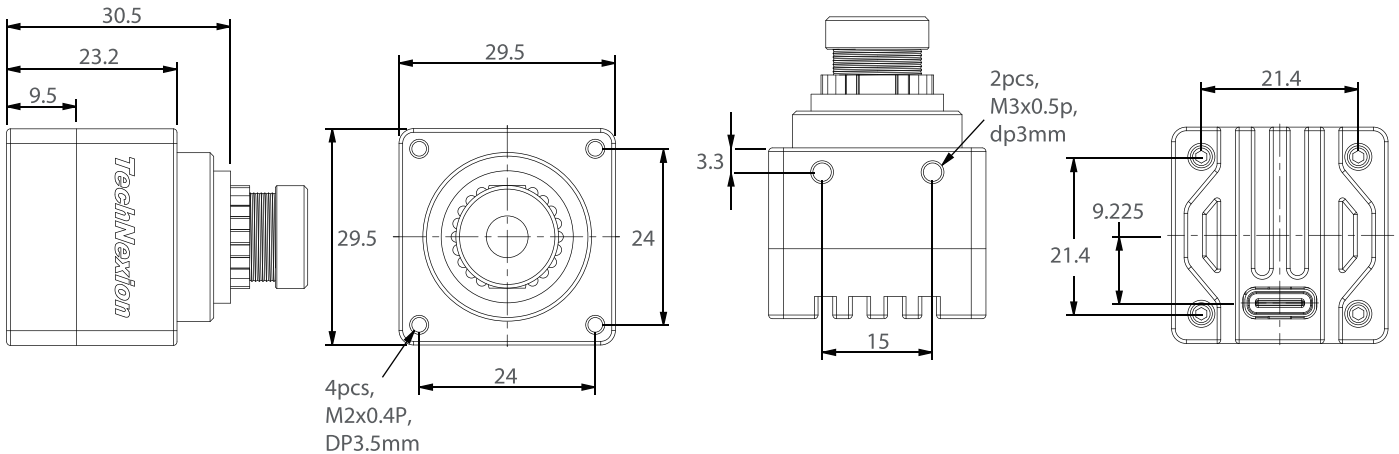
### Spectral Characteristics



### 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° ~ 85°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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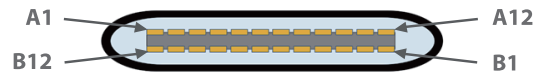
**Power**

Supply Voltage	5V
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**ISP Function**

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

**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-AR0821**

Holder / Frame	S Mount
Lens	Y

**Lens Information**

**TEVSL06072010**

Focus Length	6.0 mm
F/No.	2.8
FOV (Diagonal)	72°
TTL	28.6 mm
Range	10 cm to Infinity

\*TechNexion could provide the suitable lens base on customer demand