

# VLS-FPD3-AR0821-CB

- onsemi AR0821 8MP Rolling Shutter Sensor
- 4K HDR Imaging Capabilities
- Designed for Low Light Applications
- C-Mount for Interchangeable Lenses
- FAKRA Z-Code Automotive Connector
- Plug & Play with Linux OS & Yocto
- VizionViewer™ configuration utility
- VizionSDK for custom development



VizionSDK VizionViewer™

## Camera Information

CMOS Sensor	onsemi AR0821
Active Pixels	3848 (H) x 2168 (V) = 8 MP
Pixel Size	2.1 μm x 2.1 μm
Illuminated Type	Back Side Illuminated (BSI)
Maximum S/N Ratio	41.8 dB
Optical Format	1/1.7" (Diagonal 9.25 mm)
Shutter Type	Rolling Shutter
Chromaticity	Color
HDR Support	Yes
Maximum Frame Rate (YUV422-UYYV)	3840 x 2160 @ 15 fps 2560 x 1440 @ 30 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Output Format	YUV422-UYYV RGB888 / RGB565 RAW8 / RAW10 / RAW12

## Camera Interface

Serial Link	FPD-Link III
Serializer	TI DS90UB953
Connector	FAKRA SMB Jack Z-Code

## Power

Power over COAX	10.8V - 26.4V
Power Consumption	3840 x 2160 @ 15 fps ≤ 1.6W
Standby Power	≤ 0.1W Standby

## Software Support

Platform Support	NVIDIA Jetson Orin Nano / NX NXP i.MX95 NXP i.MX8M Plus TI Sitara™ AM68 / AM69 TI Jacinto™ TDA4VM / TDA4VH
Operation System	Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

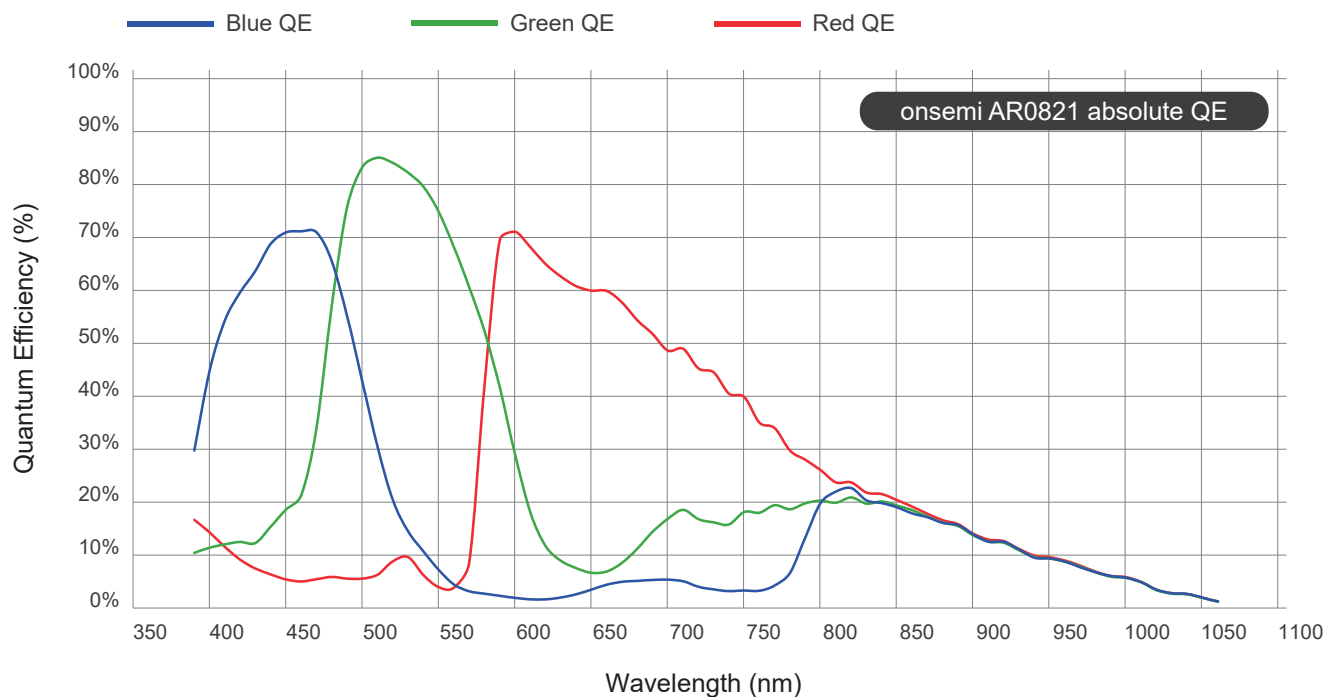
## Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 33.2(D) mm
Weight	≤ 39 grams
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis
Relative Humidity	10 to 90 %
Operating Temperature	-30°C to + 70°C

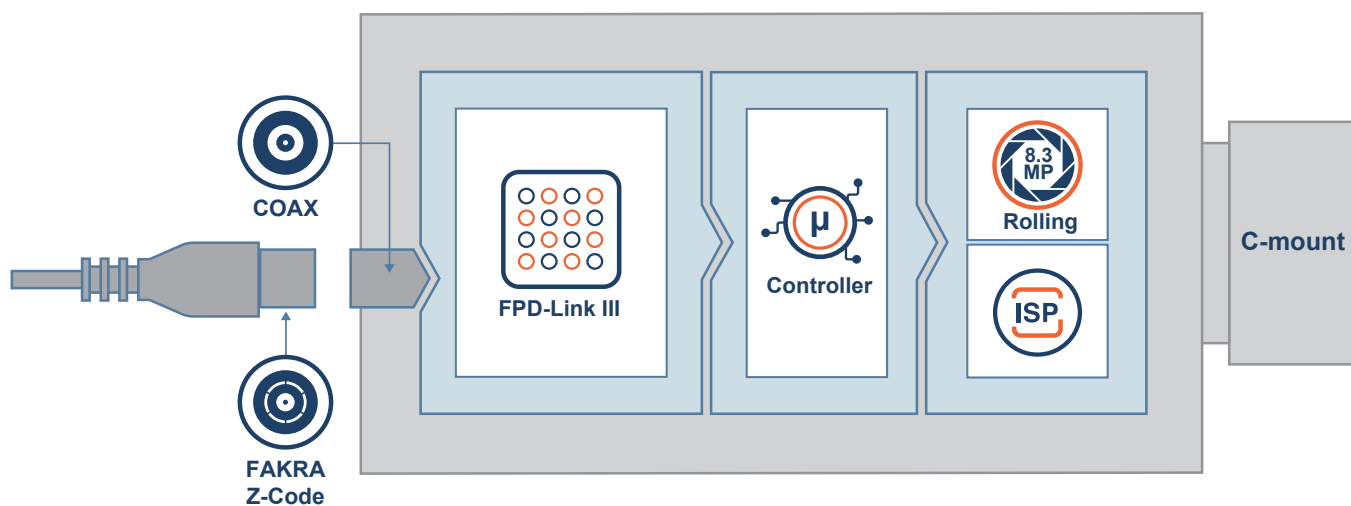
## Certification and Compliance

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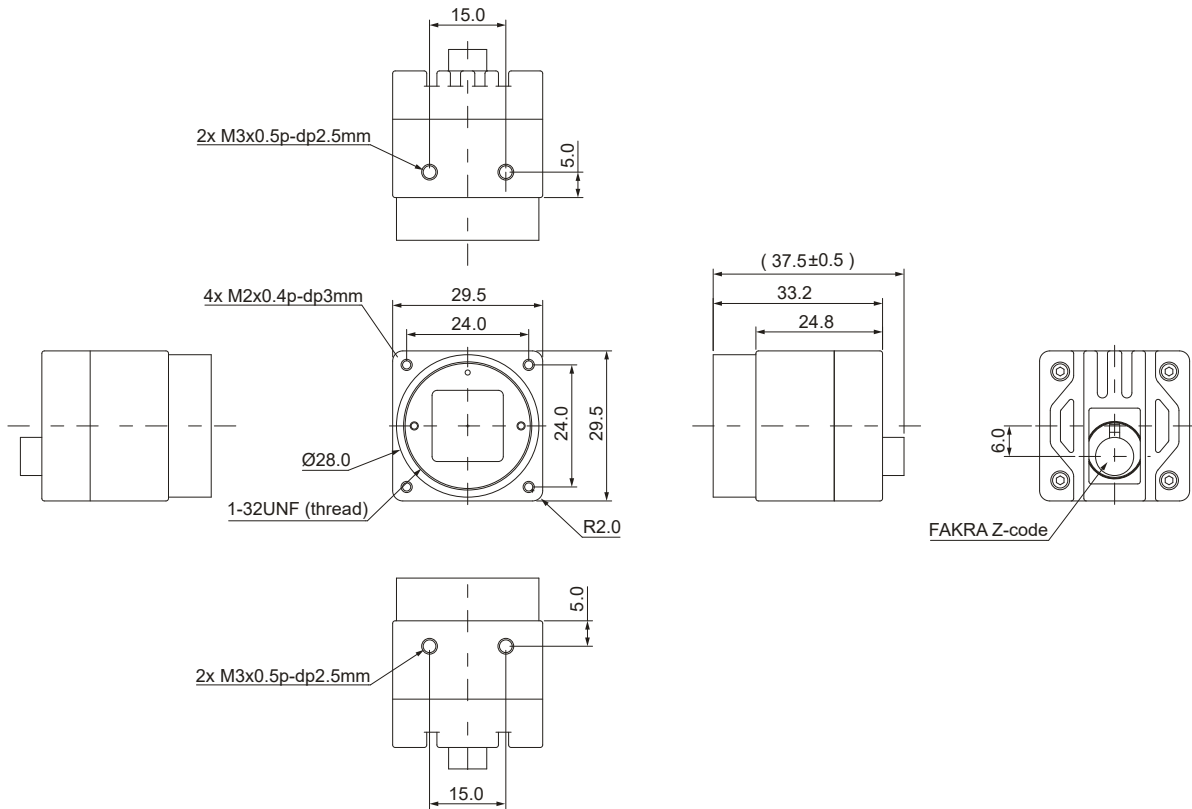
# Spectral Characteristics



# Block Diagram



## Dimensions (units in mm)



## Order Information

VLS-FPD3-AR0821-x-CB-xx-xxxx

Option	Code	Description
Chromaticity	C	Color
Filter	-	-
	IR	IR Cut Filter 650nm
Custom ID	xxxx	Custom Part number ID

For customization, please contact your TechNexion sales representative.

## Optional Accessories

An easy to attach A-Mount bracket for TechNexion 30mm enclosed cameras.



300-MOUNT-BRACKET



300-MOUNT-BRACKET 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.



# FPD-Link III Frame Grabbers

The ease of usage, benefits and integration of a FPD-Link III camera in embedded systems is often made complex by the lack of FPD-Link ports and connectors on the system. For those scenarios TechNexion developed a framegrabber that easily plug into a USB port and extend the system with FPD-Link interconnect.



### Up to 15m

Up to 15 meters of data and power transmission over a single COAX cable.



### Software

Linux and Yocto systems are supported.



### UVC Compliant

Fully plug-n-play in Windows and Linux embedded systems.



### VizionViewer™

Easy to use software utility providing you with granular camera settings control.



### Autodetect

Zero configuration required to detect any specific TechNexion FPD-Link camera by the framegrabber.



### VizionSDK

Hardcode and control your cameras with C# and Python code.

