

VLS-FPD3-AR0521-CB

- onsemi AR0521 5MP Rolling Shutter Sensor
- 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 AR0521 |
| Active Pixels | 2592 (H) x 1944 (V) = 5 MP |
| Pixel Size | 2.2 µm x 2.2 µm |
| Illuminated Type | Back Side Illuminated (BSI) |
| Maximum S/N Ratio | 40 dB |
| Optical Format | 1/2.5" (Diagonal 7.13 mm) |
| Shutter Type | Rolling Shutter |
| Chromaticity | Color |
| Maximum Frame Rate (YUV422-UYYV) | 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 @ 120 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 | 2592 x 1944 @ 24 fps ≤ 1.2W |
| Standby Power | ≤ 0.1W Standby |

Software Support

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

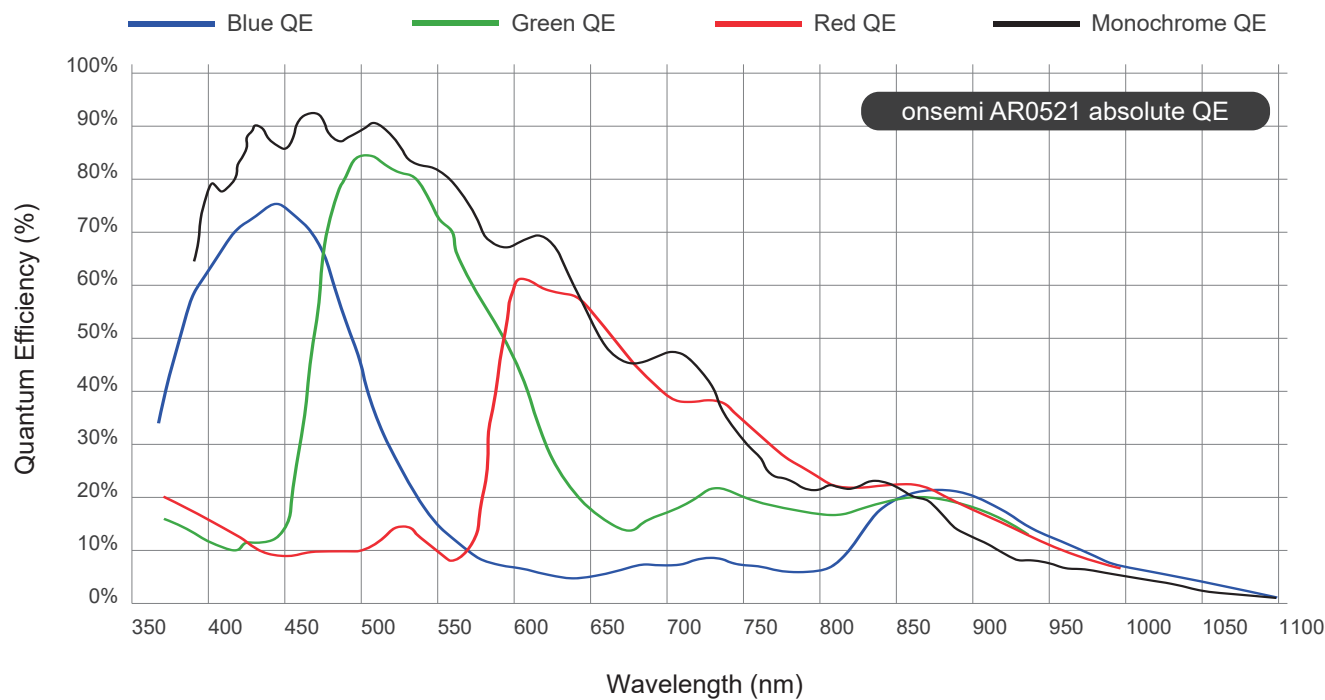
Environmental and Mechanical

| | |
|-----------------------|--------------------------------|
| Dimensions | 29.5(W) x 29.5(H) x 33.2(D) mm |
| Weight | ≤ 40 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 |

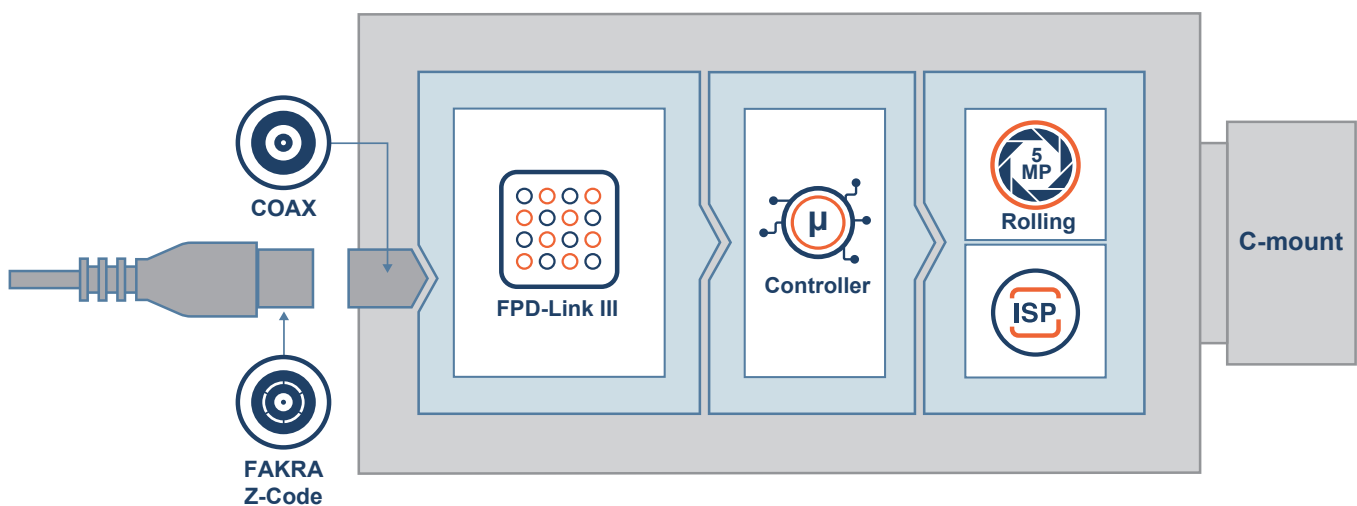
Certification and Compliance

| | |
|---------------|---|
| Certification | Compliant with CE / FCC / RoHS / REACH directives |
|---------------|---|

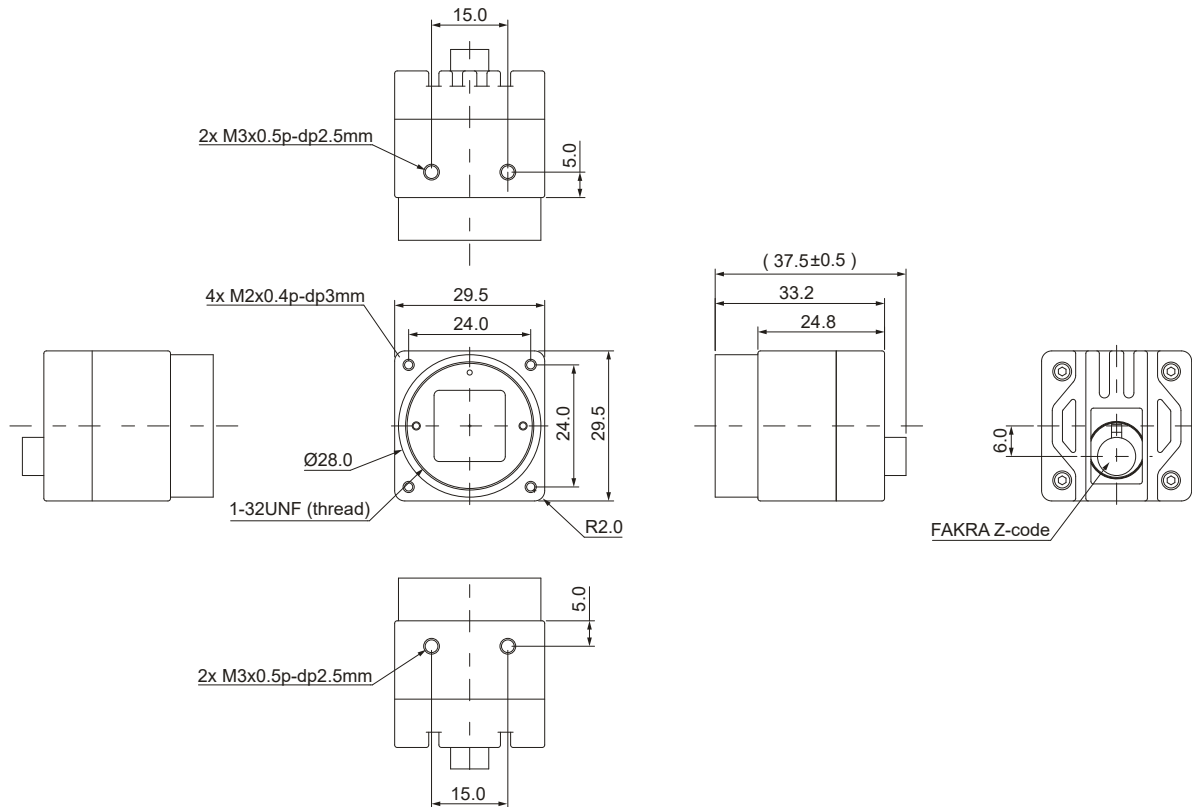
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Order Information

VLS-FPD3-AR0521-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.



UVC Compliant

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



Autodetect

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



Software

Linux and Yocto systems are supported.



VizionViewer™

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



VizionSDK

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

