

VLS-FPD3-AR0234-SL

TechNexion
INNOVATORS OF TECHNOLOGY

- onsemi AR0234 2.3MP Global Shutter Sensor
- S-Mount for Interchangeable Lenses
- FAKRA Z-Code Automotive Connector
- Plug & Play with Linux OS & Yocto
- VizionViewer™ configuration utility
- VizionSDK for custom development



Camera Information

CMOS Sensor	onsemi AR0234
Active Pixels	1920 (H) x 1200 (V) = 2.3 MP
Pixel Size	3.0 μm x 3.0 μm
Illuminated Type	Front Side Illuminated (FSI)
Maximum S/N Ratio	38 dB
Optical Format	1/2.6" (Diagonal 6.8 mm)
Shutter Type	Global Shutter
Chromaticity	Color
Maximum Frame Rate (YUV422-UYYV)	1920 x 1200 @ 60 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 120 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	1920 x 1200 @ 60 fps $\leq$ 1.25W
Standby Power	$\leq$ 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



VizionSDK



VizionViewer™

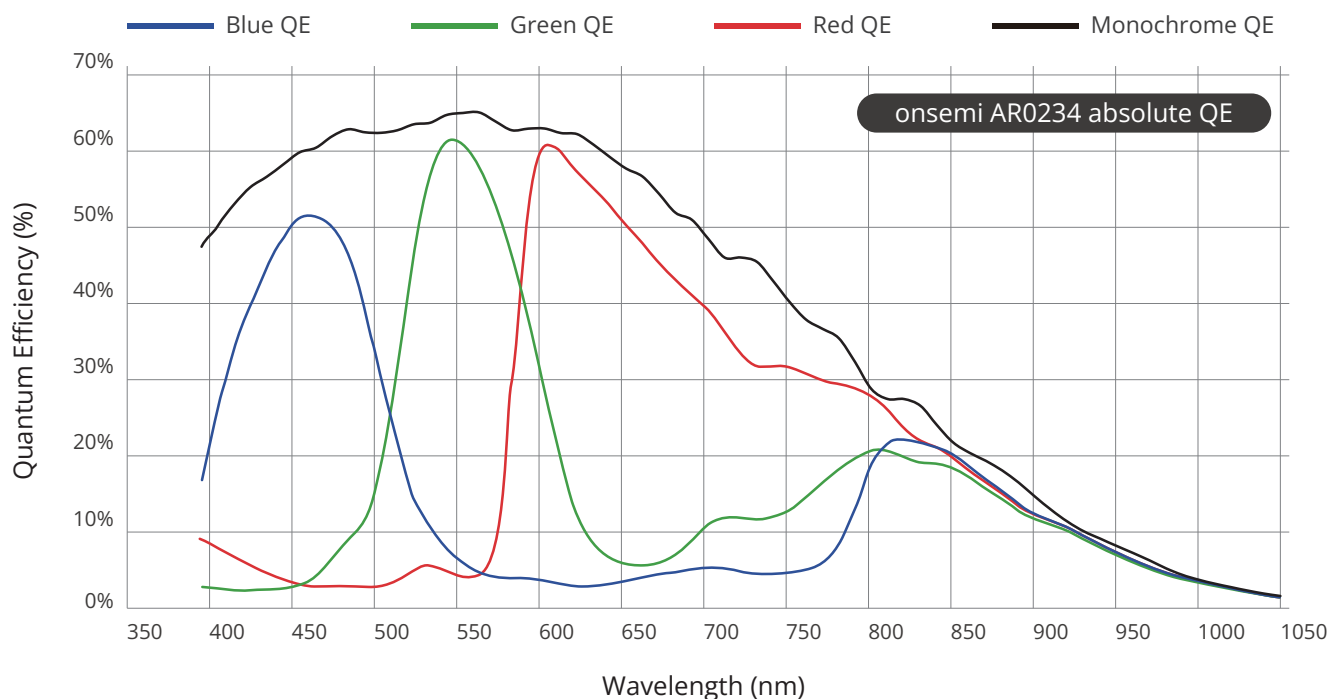
Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 28(D) mm
Weight	$\leq$ 45 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

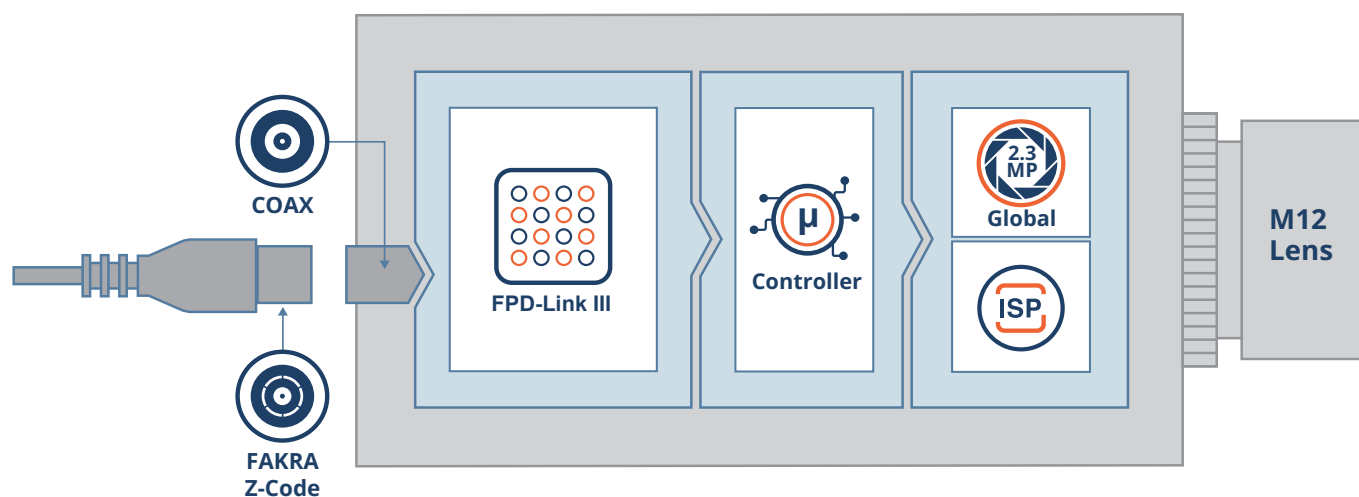
Certification and Compliance

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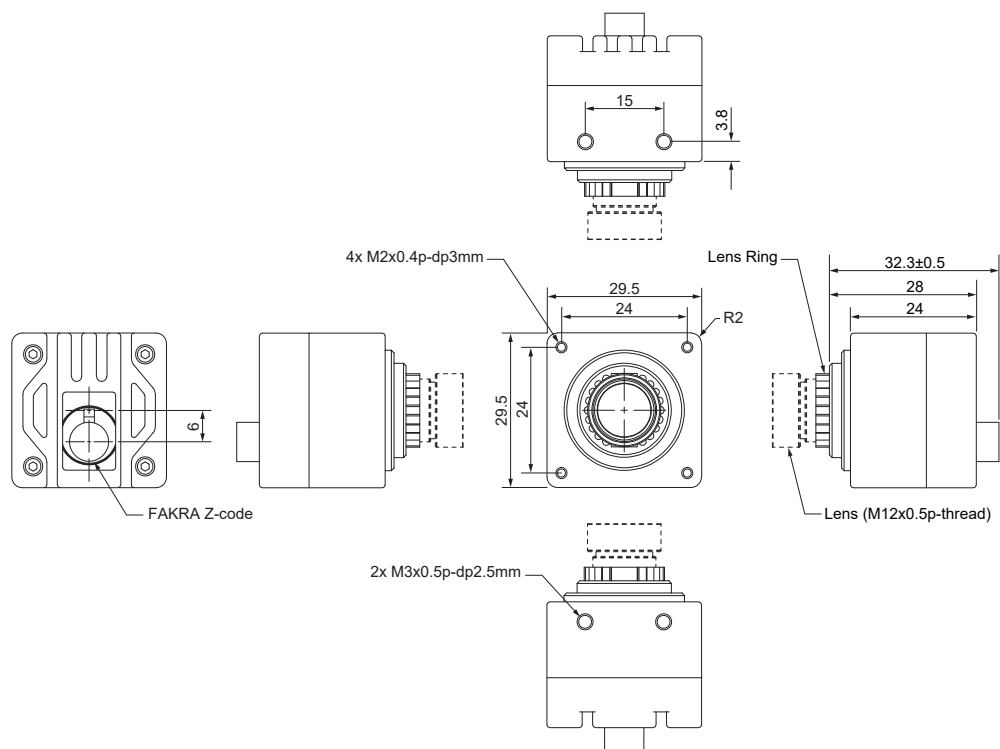
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Order Information

VLS-FPD3-AR0234-x-Sxx-xx-xxxx

Option	Code	Description
Chromaticity	C	Color
Lens	S32	S-Mount Module D-FOV 32°
	S83	S-Mount Module D-FOV 83°
	S128	S-Mount Module D-FOV 128°
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

			
	VLS-FPD3-AR0234-C-S32-IR	VLS-FPD3-AR0234-C-S83-IR	VLS-FPD3-AR0234-C-S128-IR
Focus Type	Fixed Focus	Fixed Focus	Fixed Focus
Focal Length	12 mm	3.9 mm	2.87 mm
Aperture	F2.0	F2.8	F2.8
Module D-FOV	31.8° ± 5%	82.8° ± 5%	127.7° ± 5%
Module H-FOV	26.9° ± 5%	73.4° ± 5%	110.5° ± 5%
Module V-FOV	16.8° ± 5%	50.1° ± 5%	68.6° ± 5%
TTL	23.2 mm	22 mm	21 mm
BFL	7.3 mm	4.54 mm	5.27 mm
MOD	0.3 m	0.3 m	0.3 m
Distortion	<-2.50%	<1.26%	<-20%
IR-Filter	650 nm	650 nm	650 nm
Lens Structure	5G + IR	2G + 2P + IR	4G + 1P + IR
First layer material	Glass	Plastic	Glass

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.

