

VLS3-AR0144-CB

- onsemi AR0144 1MP Global Shutter Sensor
- Captures high-speed dynamic targets clearly within an ultra-short exposure time.
- C-Mount for Interchangeable Lenses
- FAKRA Automotive Connector
- Plug & Play with Linux OS & Yocto
- Comes with VizionViewer™ Configuration Utility and VizionSDK



Specifications

Camera Information

CMOS Sensor	onsemi AR0144
Active Pixels	1280 (H) x 800 (V) = 1.0MP
Pixel Size	3.0 μm x 3.0 μm
Optical Format	1/4" (Diagonal 4.5 mm)
Shutter Type	Global Shutter
Chromaticity	Color
Illuminated type	Front Side Illuminated (FSI)
Maximum Frame Rate (UYVY)	1280 x 800 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps
Maximum S/N Ratio	38 dB
Output Format	UYVY

Camera Interface

Connector	FAKRA SMB Jack Z-Code
Serial Link	FPD-Link III

Power

Supply Voltage	12V \pm 5%
Power Consumption	UYVY 1280 x 800 @ 60 fps \leq 0.9W
Standby Power	\leq 0.1W Standby



yocto
PROJECT

Software Support

Platform Support	x86 Intel / AMD NXP i.MX8M Mini / Plus NXP i.MX93 TI Sitara™ AM62x / AM62A TI Jacinto™ TDA4VM / TDA4VA / TDA4VH NVIDIA Jetson Nano NVIDIA Xavier NX NVIDIA Orin Nano/NX
Operation System	Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

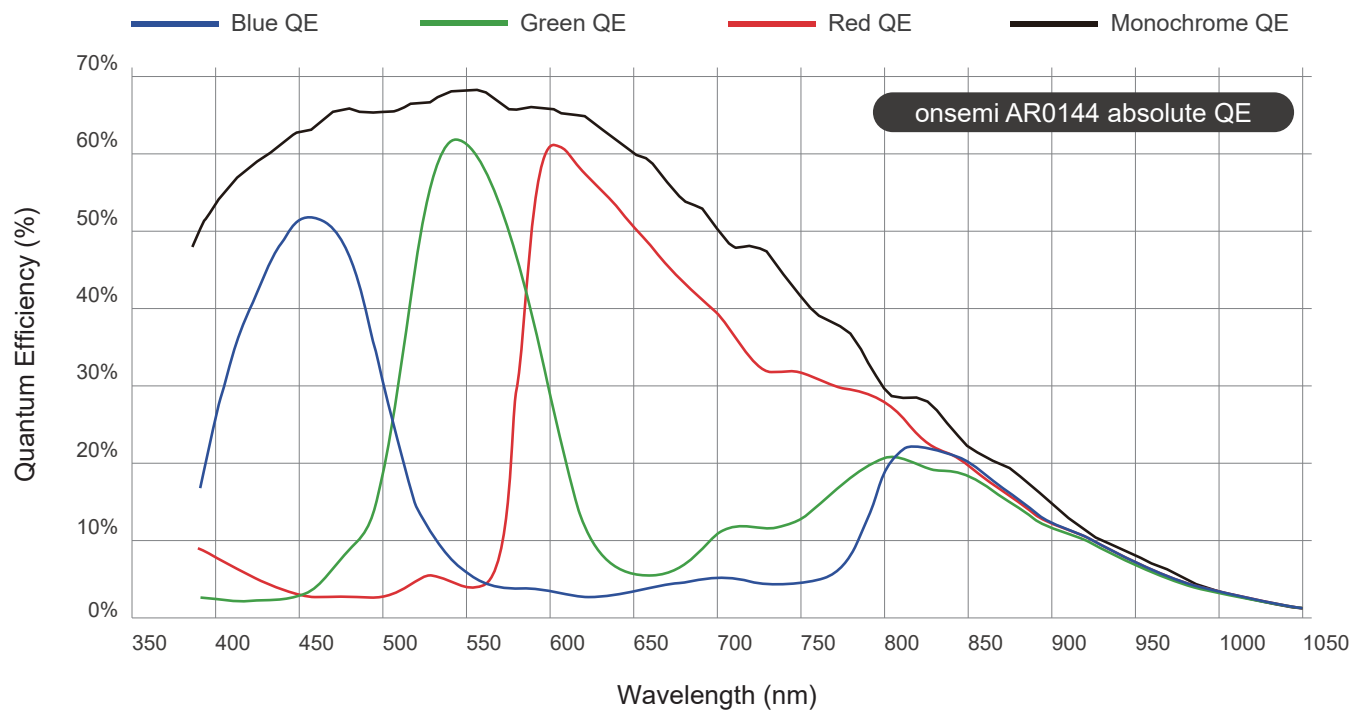
Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 37.5(D) mm
Weight	40 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

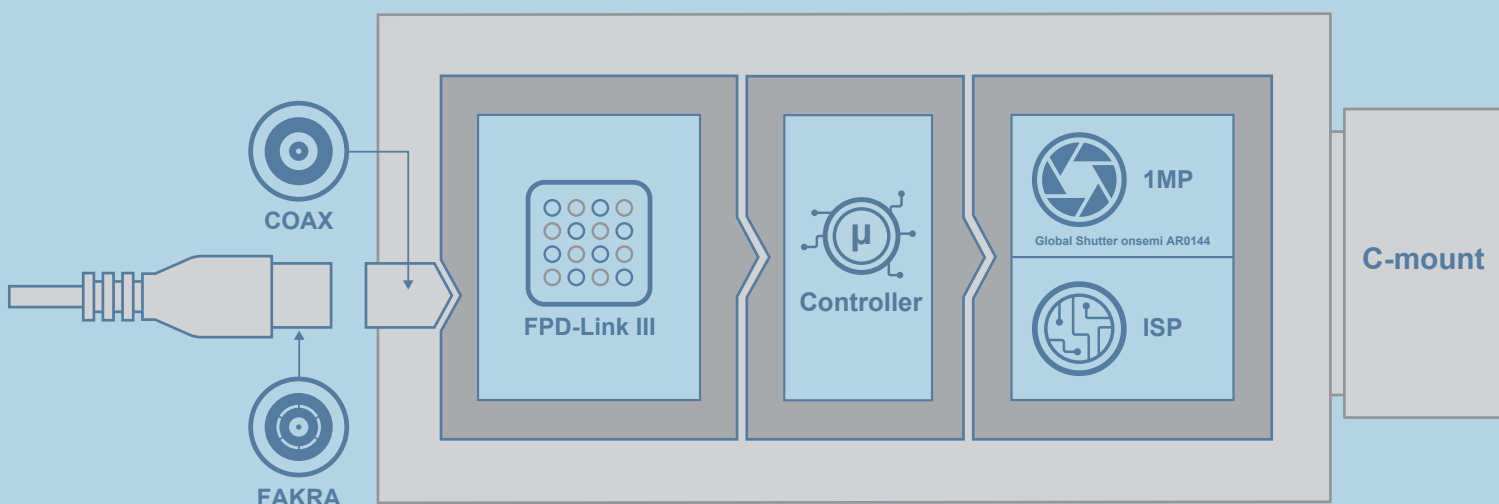
Certification and Compliance

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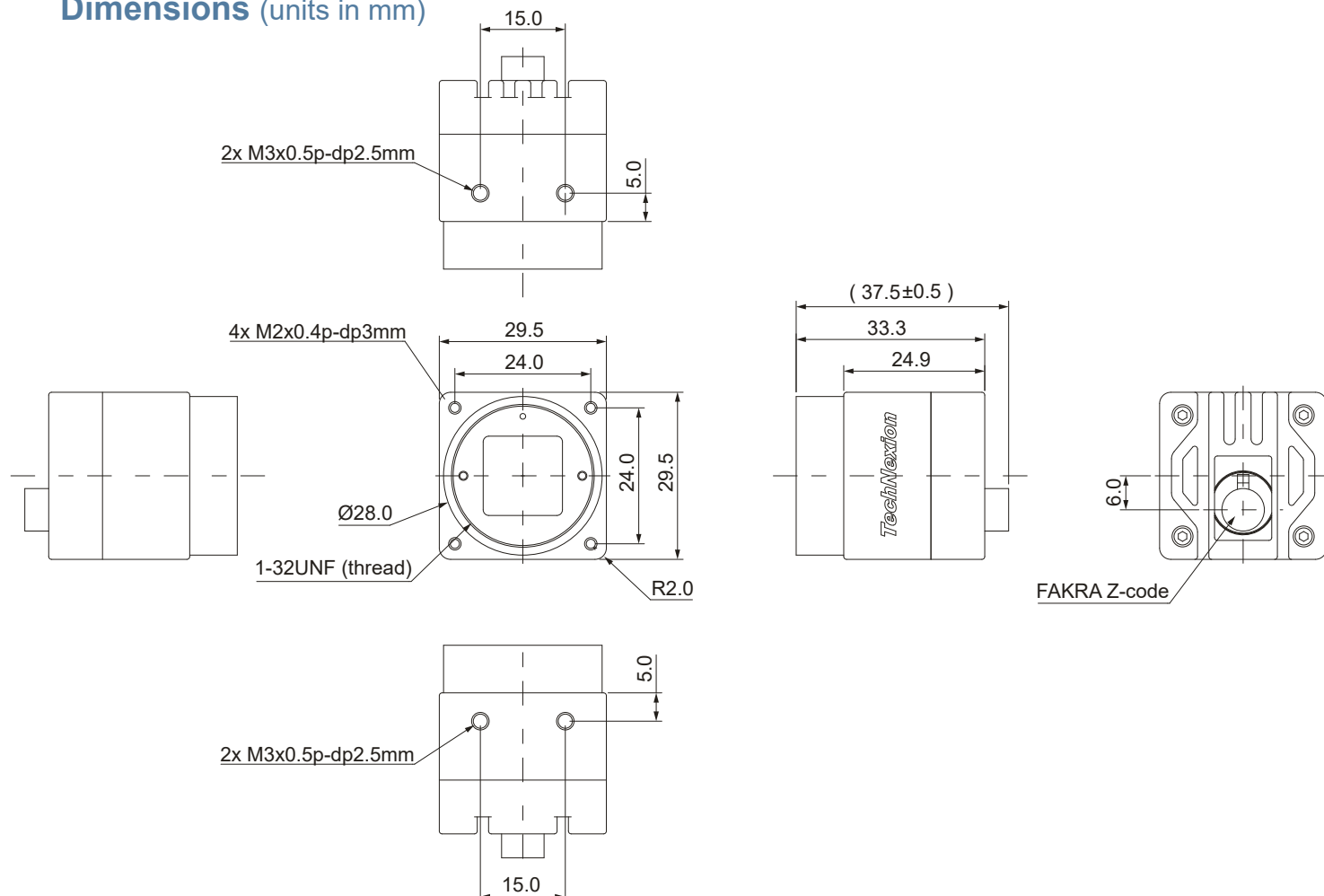
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Order Information

VLS3-AR0144-x-CB-xx

Part Number Rules

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

For customization, please contact your TechNexion sales representative.

Optional Accessories

300-MOUNT-BRACKET

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.



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

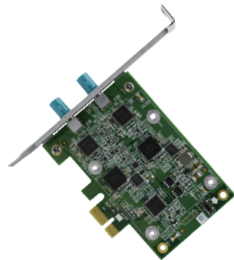
FPD-Link III Frame Grabbers

Adding TechNexion FPD-Link III cameras to an existing x86 Intel or AMD based system couldn't be easier by using our full range frame grabber cards.

- Available in 1 / 2 / 4 / 8 port FPD-Link III camera frame grabber configuration
- Fits in a standard PCI Express Gen 3 slot
- Plug-n-Play driver-less UVC based solution
- Complete Fanless design with brushed aluminium thermal solution
- Comes with TechNexion VizionSDK



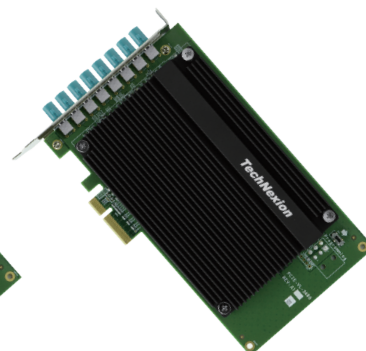
UVC-VL-3100



PCIE-VL-3120



PCIE-VL-3440



PCIE-VL-3480

Nvidia Orin Fanless AI Computing



- Nvidia Orin Nano / NX Systems
- Up-to 8 FPD-Link III cameras
- Nvidia Jetpack driver integration
- TechNexion VizionSDK

TRAQ-4VM Robotic AMR Solutions



- TI TDA4VM
- Up-to 8 FPD-Link III cameras
- FPD-Link III Display
- Single Pair Ethernet (SPE) sensor network extension
- Linux / Debian support
- TechNexion VizionSDK

i.MX8M Plus HMI Solutions



- NXP i.MX8M Plus
- Available as 15" / 15.6" / 21.5" Display solution
- Up-to 2 FPD-Link III cameras
- FPD-Link III remote Display
- Linux / Debian / Android support
- TechNexion VizionSDK

i.MX8M Plus Edge Computing



- NXP i.MX8M Plus
- Available with By-pass Ethernet solution
- Extensive low-speed I/O availability
 - GPIO / UART / CAN / USB
- Up-to 2 FPD-Link III cameras
- Linux / Debian / Android support
- TechNexion VizionSDK