

# VLS-GM2-AR0521-CB

- onsemi AR0521 5MP Rolling Shutter Sensor
- Designed for Low Light Applications
- C-Mount for Interchangeable Lenses
- GMSL2™ (Gigabit Multimedia Serial Link) interface
- 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 $\mu\text{m}$ x 2.2 $\mu\text{m}$
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	GMSL2
Serializer	MAX96717
Connector	FAKRA SMB Jack Z-Code

## Power

Power over COAX	10.8V - 26.4V
Power Consumption	2592 x 1944 @ 24 fps $\leq$ 1.68W
Standby Power	$\leq$ 0.6W Standby

## Software Support

Platform Support	NVIDIA Jetson AGX Orin NVIDIA Jetson Orin Nano / NX NXP i.MX95 NXP i.MX8M Plus Intel Arrow Lake Intel Panther Lake
Operation System	Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

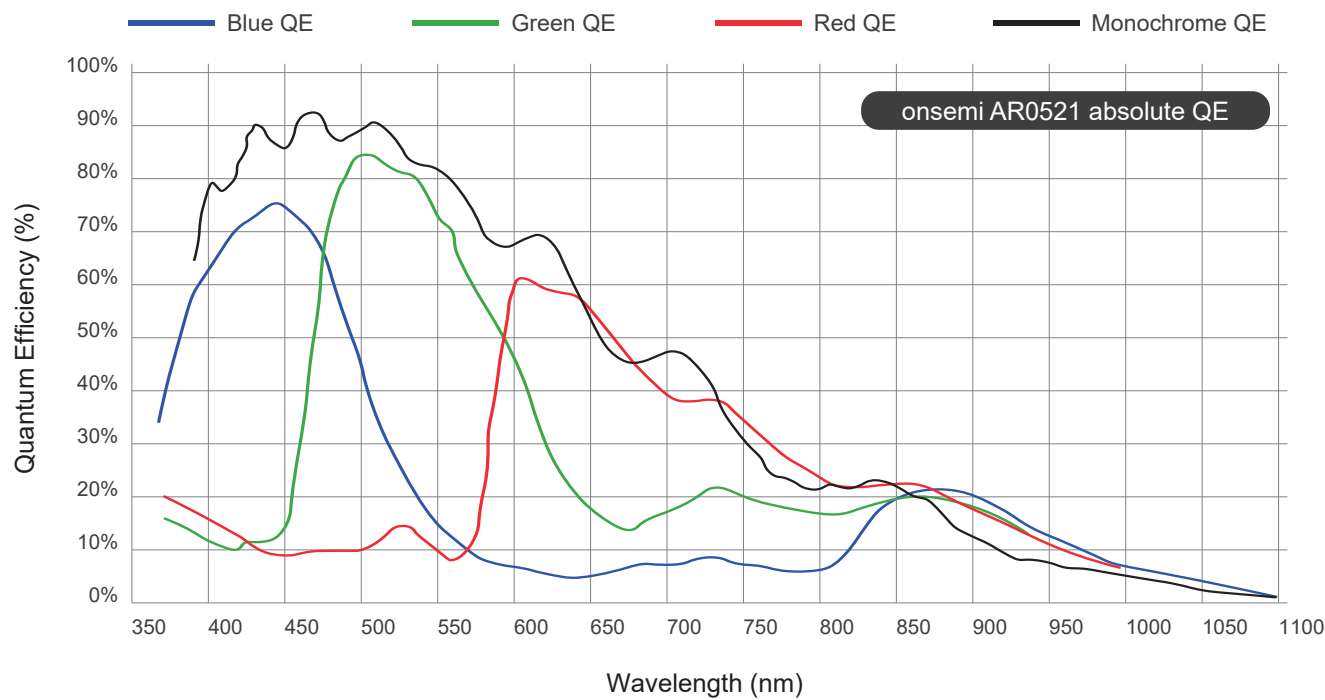
## Environmental and Mechanical

Dimensions	29.5(W) x 29.5(H) x 33.2(D) mm
Weight	$\leq$ 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

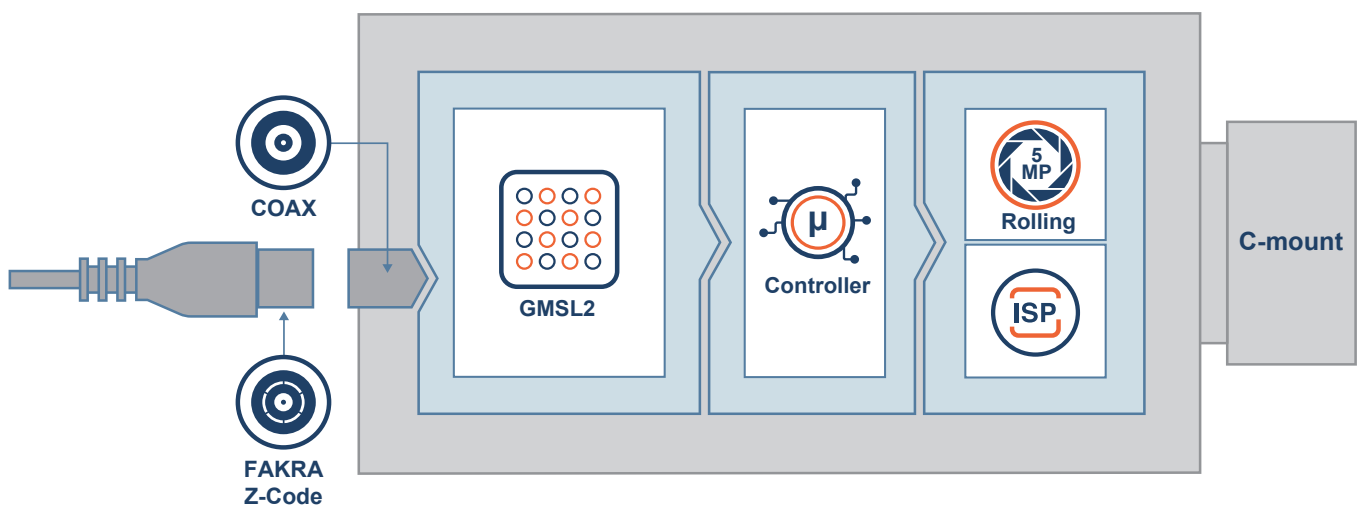
## Certification and Compliance

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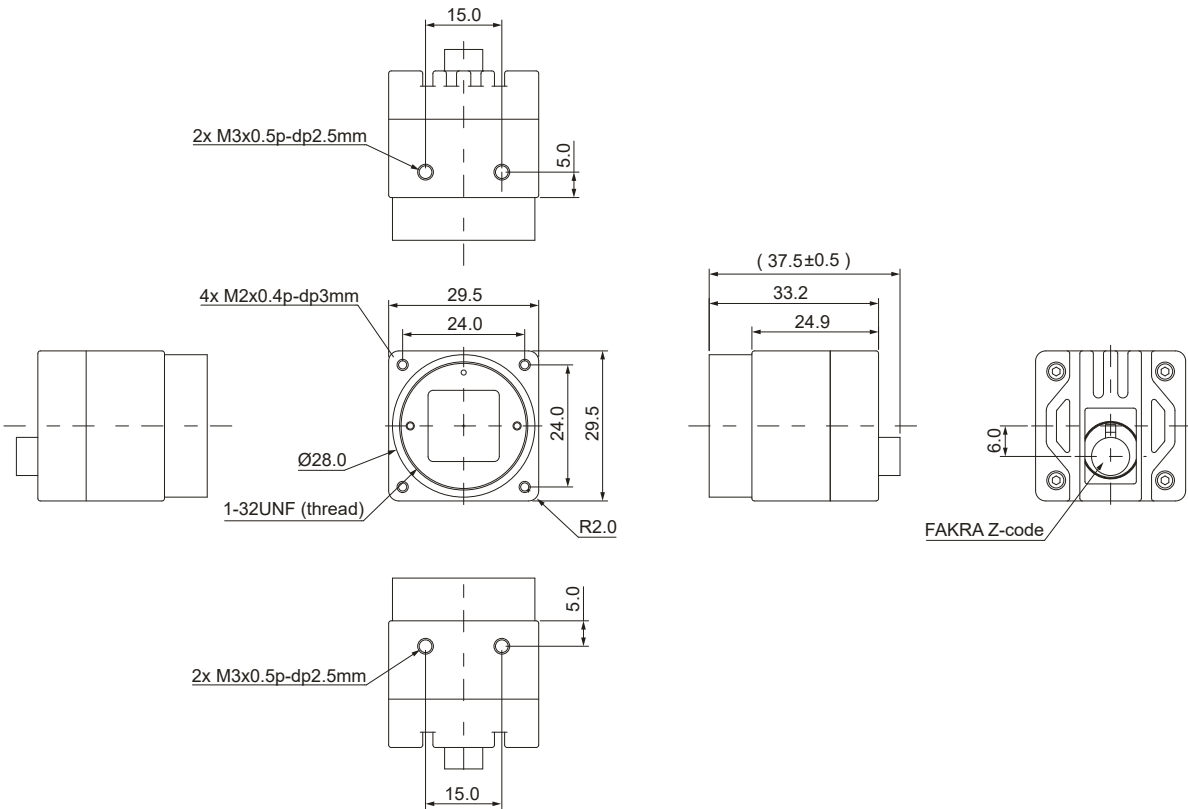
# Spectral Characteristics



# Block Diagram



## Dimensions (units in mm)



## Order Information

VLS-GM2-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.



## GMSL2 Frame Grabbers

The ease of usage, benefits and integration of a GMSL camera in embedded systems is often made complex by the lack of GMSL ports and connectors on the system. For those scenarios TechNexion developed a range of framegrabbers that easily plug into a USB port and extend the system with 1 to 4 GMSL interconnects.



### 1-4 Port

Connect up-to 4 GMSL cameras to a single USB port on your x86 or Arm based system.



### UVC Compliant

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



### Autodetect

Zero configuration required to detect any specific TechNexion GMSL camera by the framegrabber.



### Software

Linux and Windows 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.

