# **TechNexion**

# UVLS-GM2-AR0234

- onsemi AR0234 2.3MP Global Shutter Sensor
- S-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







#### **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-UYVY)	1920 x 1200 @ 60 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 120 fps 640 x 480 @ 120 fps	
Output Format	YUV422-UYVY 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	1920 x 1200 @ 60 fps ≤ 1.25W
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
Operation System	Linux Yocto
Software	VizionViewer™
Development SDK	VizionSDK

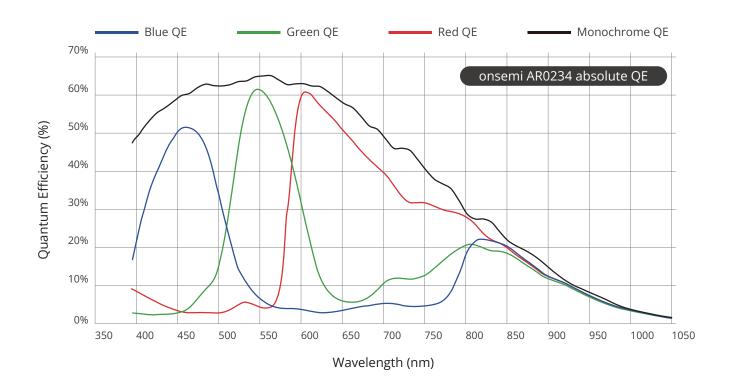
#### **Environmental and Mechanical**

Dimensions	24.5(W) x 24.5(H) x 30(D) mm
Weight	≤ 20 grams
Operating Temperature	e -30°C to + 70°C

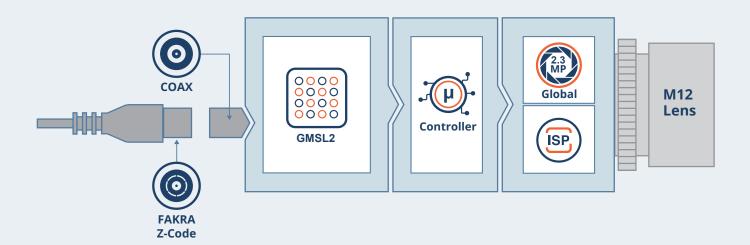
#### **Certification and Compliance**

Certification	Compliant with CE / FCC / RoHS /
	REACH directives

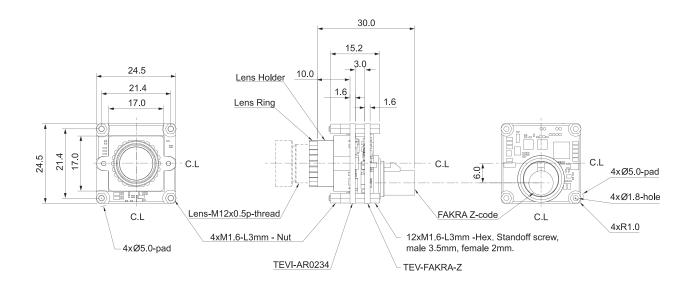
## **Spectral Characteristics**



# **Block Diagram**



### **Dimensions** (units in mm)



#### **Order Information**

#### UVLS-GM2-AR0234-x-Sxx-xx-xxxx

Option	Code	Description	
Chromaticity	С	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 customized Software loader and special component (BOM)	

For customization, please contact your TechNexion sales representative.

# **Optional Accessories**

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



245-MOUNT-BRACKET



245-MOUNT-BRACKET on tripod (tripod not included)



For more information:

www.technexion.com

#### **Custom Lens Solutions**







UVLS-GM2-AR0234-C-S83-IR



UVLS-GM2-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

#### **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.



#### **Software**

Linux and Windows 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 GMSL camera by the framegrabber.



#### **VizionSDK**

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









