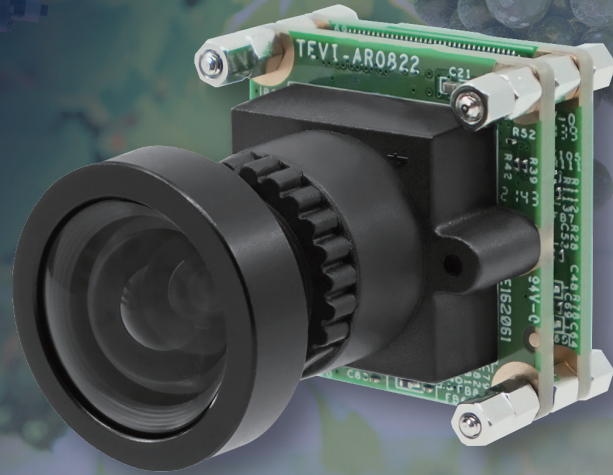


UVCI-AR0822

- onsemi AR0822 8MP Rolling Shutter Sensor
- 4K HDR Imaging Capabilities
- Near Infra-Red Enhancement for Outdoor Applications
- Designed for Low Light Applications
- S-Mount for Interchangeable Lenses
- UVC USB Type-C 5 Gbps Connector
- Plug & Play with Windows & Linux OS
- Comes with VizionViewer™ Configuration Utility and VizionSDK



Distributed by:



Specifications

Camera Information

| | |
|----------------------------|---|
| CMOS Sensor | onsemi AR0822 |
| Active Pixels | 3840 (H) x 2160 (V) = 8MP |
| Pixel Size | 2.0 μm x 2.0 μm |
| Optical Format | 1/2" (Diagonal 8.81 mm) |
| Shutter Type | Rolling Shutter |
| Chromaticity | Color |
| Illuminated type | Back Side Illuminated (BSI) |
| Maximum Frame Rate (MJPEG) | 3840 x 2160 @ 30 fps 2560 x 1440 @ 60 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps |
| Maximum Frame Rate (UYVY) | 3840 x 2160 @ 15 fps 2560 x 1440 @ 30 fps 1920 x 1080 @ 60 fps 1280 x 720 @ 60 fps 640 x 480 @ 60 fps |
| Maximum S/N Ratio | 40.5 dB |
| HDR Support | Yes |
| Output Format | MJPEG (JPG) UYVY |

Camera Interface

| | |
|-----------|-------------------|
| Connector | USB Type-C 5 Gbps |
|-----------|-------------------|

Power

| | |
|-------------------|---------------------------------------|
| Supply Voltage | 5V \pm 5% |
| Power Consumption | UYVY 3840 x 2160 @ 15 fps \leq 1.3W |
| Standby Power | \leq 0.1W Standby |

Software Support

| | |
|------------------|--|
| Operation System | UVC Plug-and-play Windows 10/11 Linux Yocto |
| Software | VizionViewer™ |
| Development SDK | VizionSDK |

Environmental and Mechanical

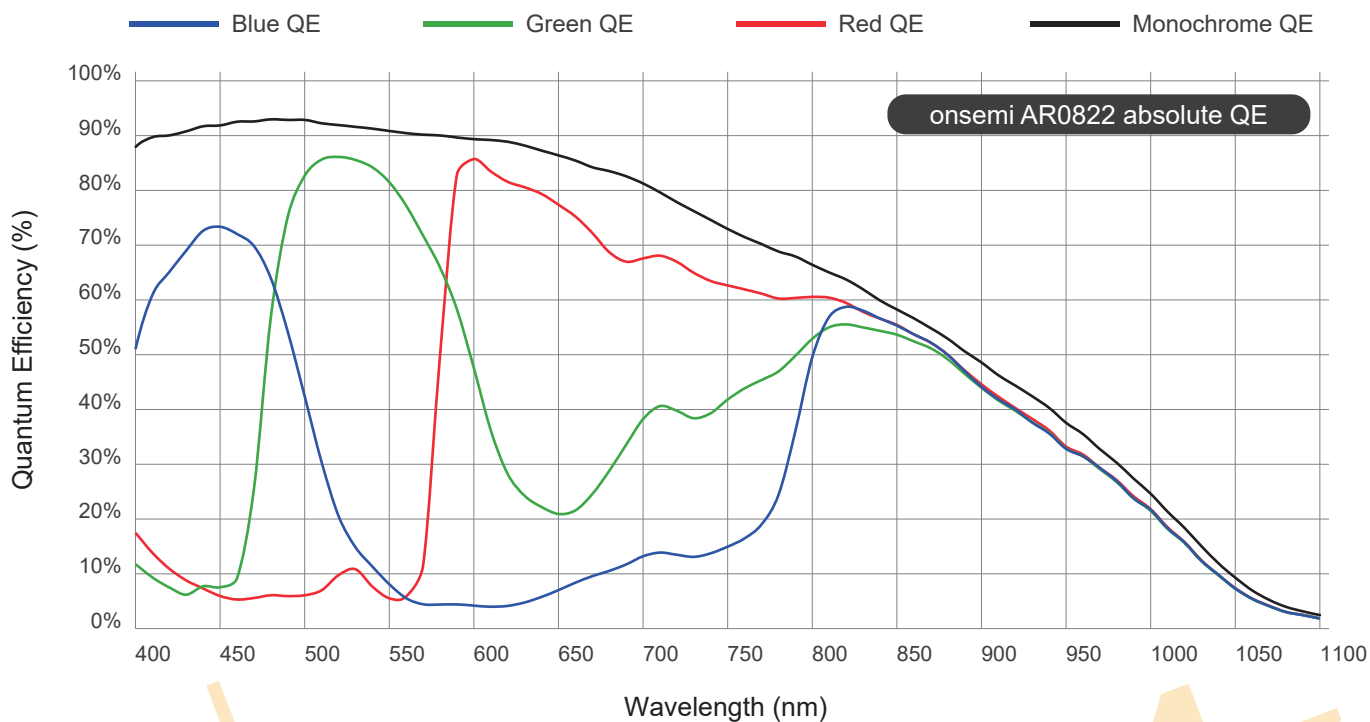
| | |
|-----------------------|--------------------------------|
| Dimensions | 24.5(W) x 24.5(H) x 25.6(D) mm |
| Weight | 23 grams |
| Operating Temperature | -30°C to +70°C |

Certification and Compliance

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



Spectral Characteristics

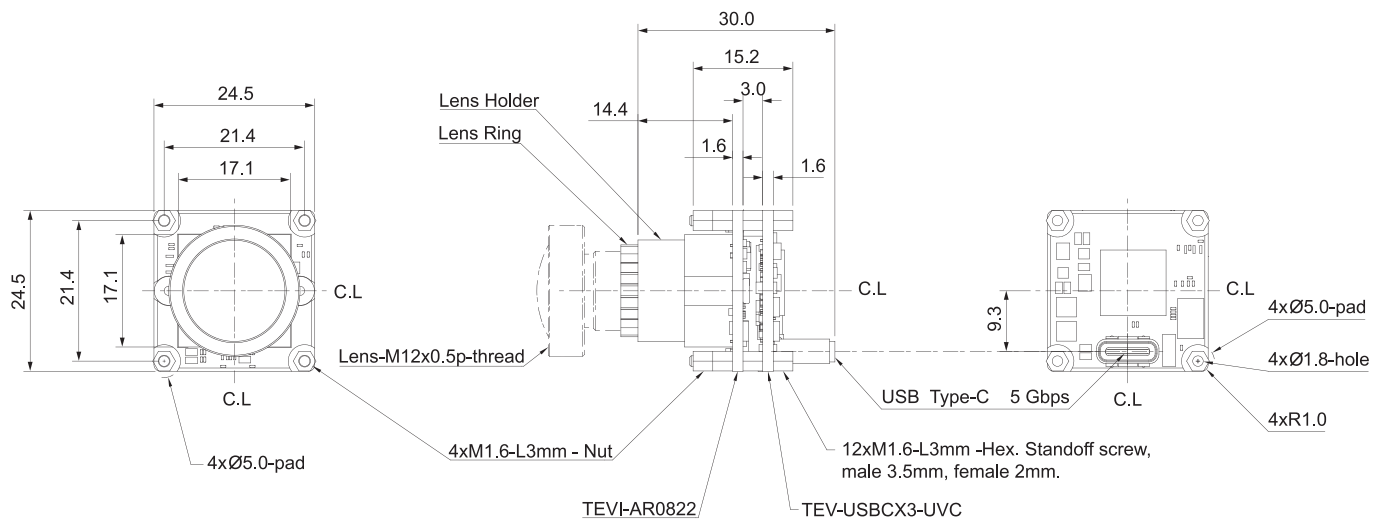


Connector Pin Definition

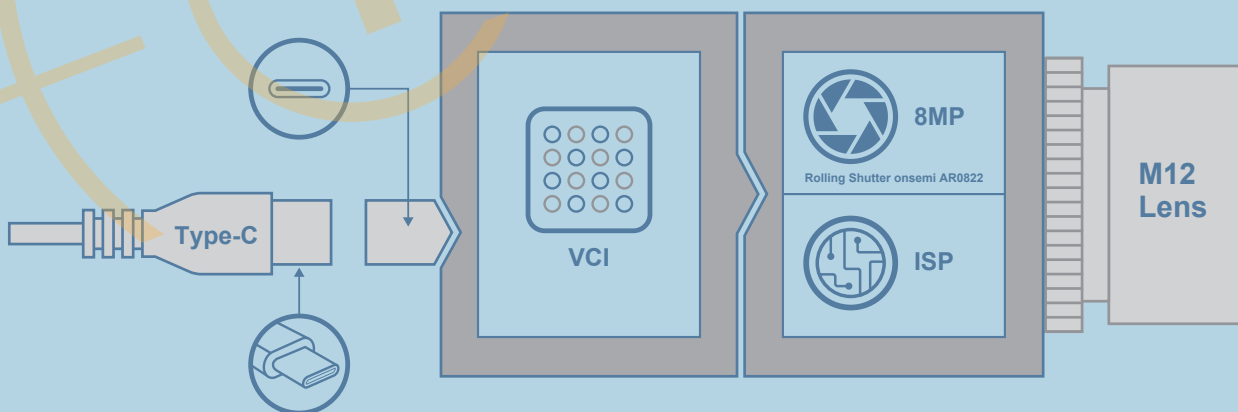


| | | | |
|------------|-------|------------|-------|
| A1 | GND | B12 | GND |
| A2 | TXP1 | B11 | RXP1 |
| A3 | TXN1 | B10 | RXN1 |
| A4 | VBUS1 | B9 | VBUS3 |
| A5 | CC1 | B8 | SBU2 |
| A6 | DP1 | B7 | DN2 |
| A7 | DN1 | B6 | DP2 |
| A8 | SBU1 | B5 | CC2 |
| A9 | VBUS2 | B4 | VBUS4 |
| A10 | RXN2 | B3 | TXN2 |
| A11 | RXP2 | B2 | TXP2 |
| A12 | GND | B1 | GND |

Dimensions (units in mm)



Block Diagram



Lens Information

| |  |  |  |  |
|--------------|---|---|--|---|
| | UVCI-AR0822-C-S42-IR | UVCI-AR0822-C-S72-IR | UVCI-AR0822-C-S108-IR | UVCI-AR0822-C-S150-IR |
| Focus Type | Fixed Focus | Fixed Focus | Fixed Focus | Fixed Focus |
| Focal Length | 12 mm | 6 mm | 5 mm | 3.2 mm |
| Aperture | F2.0 | F2.8 | F2.0 | F2.0 |
| Lens D-FOV | 41.0° | 72.0° | 113.0° | 160.0° |
| Lens H-FOV | 38.0° | 61.0° | 94.0° | 131.0° |
| Lens V-FOV | 22.0° | 47.0° | 50.0° | 99.0° |
| Module D-FOV | 41.7° ± 5% | 72.0° ± 5% | 108.3° ± 5% | 150.0° ± 5% |
| Module H-FOV | 36.3° ± 5% | 64.7° ± 5% | 93.0° ± 5% | 132.6° ± 5% |
| Module V-FOV | 20.5° ± 5% | 39.0° ± 5% | 50.6° ± 5% | 77.6° ± 5% |
| TTL | 23.9 mm | 28.6 mm | 29.4 mm | 44.98 mm |
| BFL | 3.88 mm | 8.8 mm | 6.05 mm | 6.14 mm |
| MOD | 0.15 m | 0.1 m | 0.3 m | 0.3 m |
| Distortion | <0.2% | <0.5% | <-43.70% | <-32% |
| IR-Filter | 650 nm | 650 nm | 650 nm | 650 nm |

Order Information

UVCI-AR0822-x-Sxx-xx

Part Number Rules

| Option | Code | Description |
|--------------|------|---------------------------|
| Chromaticity | C | Color |
| Lens | S42 | S-Mount Module D-FOV 42° |
| | S72 | S-Mount Module D-FOV 72° |
| | S108 | S-Mount Module D-FOV 108° |
| | S150 | S-Mount Module D-FOV 150° |
| Filter | - | - |
| | IR | IR Cut Filter 650nm |

For further customization or questions about orders, contact your TechNexion sales representative.

Optional Accessories

TEVI-MOUNT-BRACKET-A

An easy to attach A-Mount bracket for TechNexion TEVI cameras.



TEVI-MOUNT-BRACKET-A



TEVI-MOUNT-BRACKET-A on tripod
(tripod not included)

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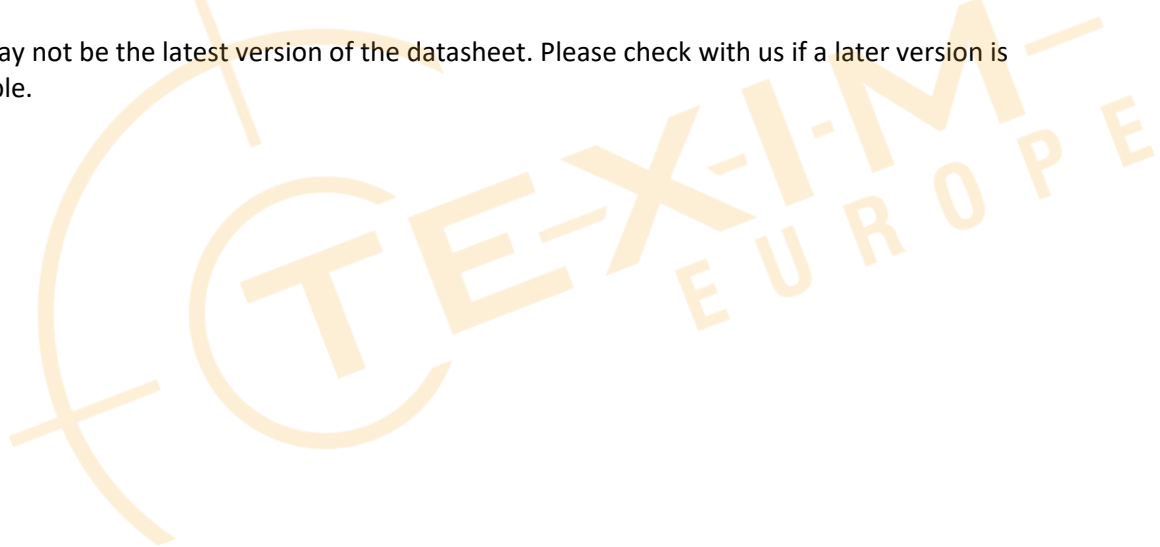
It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.





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