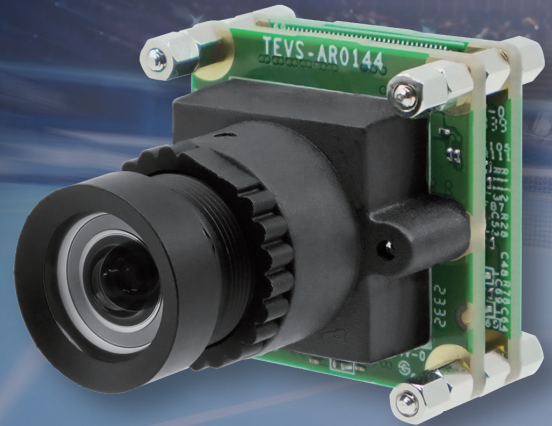


UVLS3-AR0144

- onsemi AR0144 1MP Global Shutter Sensor
- Captures high-speed dynamic targets clearly within an ultra-short exposure time.
- S-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 |

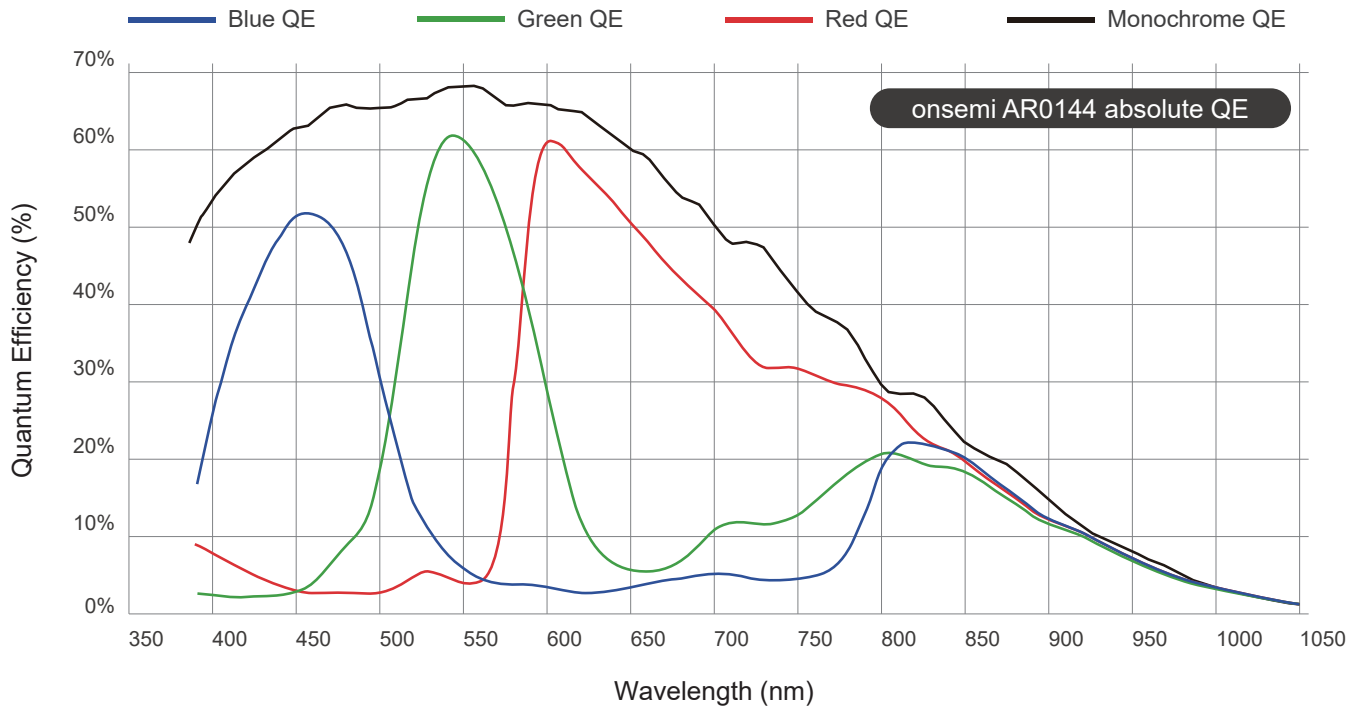
Environmental and Mechanical

| | |
|-----------------------|--------------------------------|
| Dimensions | 24.5(W) x 24.5(H) x 30.0(D) mm |
| Weight | 20 grams |
| Operating Temperature | -30°C to +70°C |

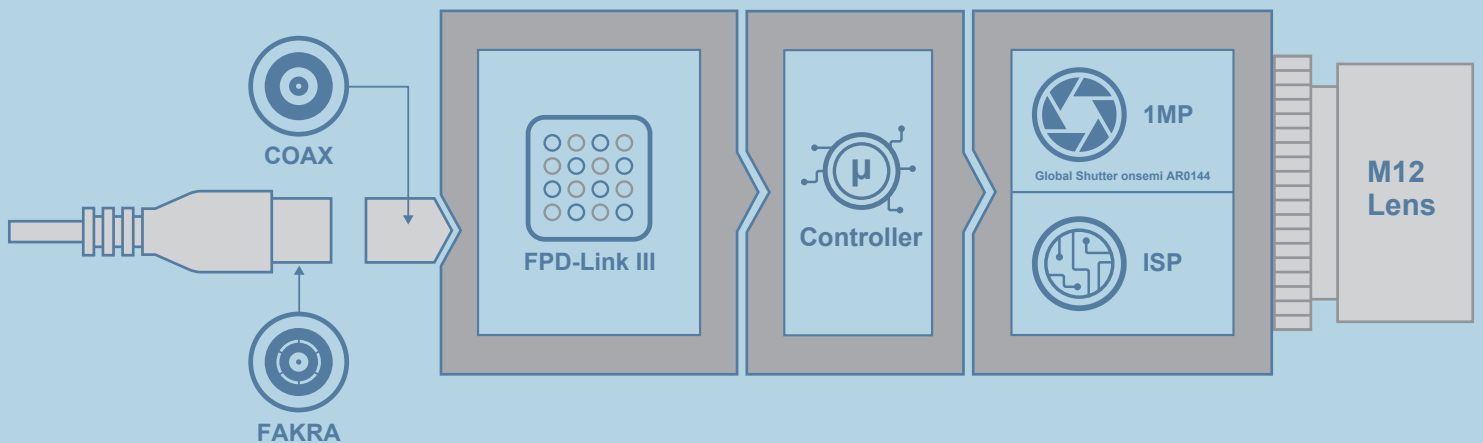
Certification and Compliance

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

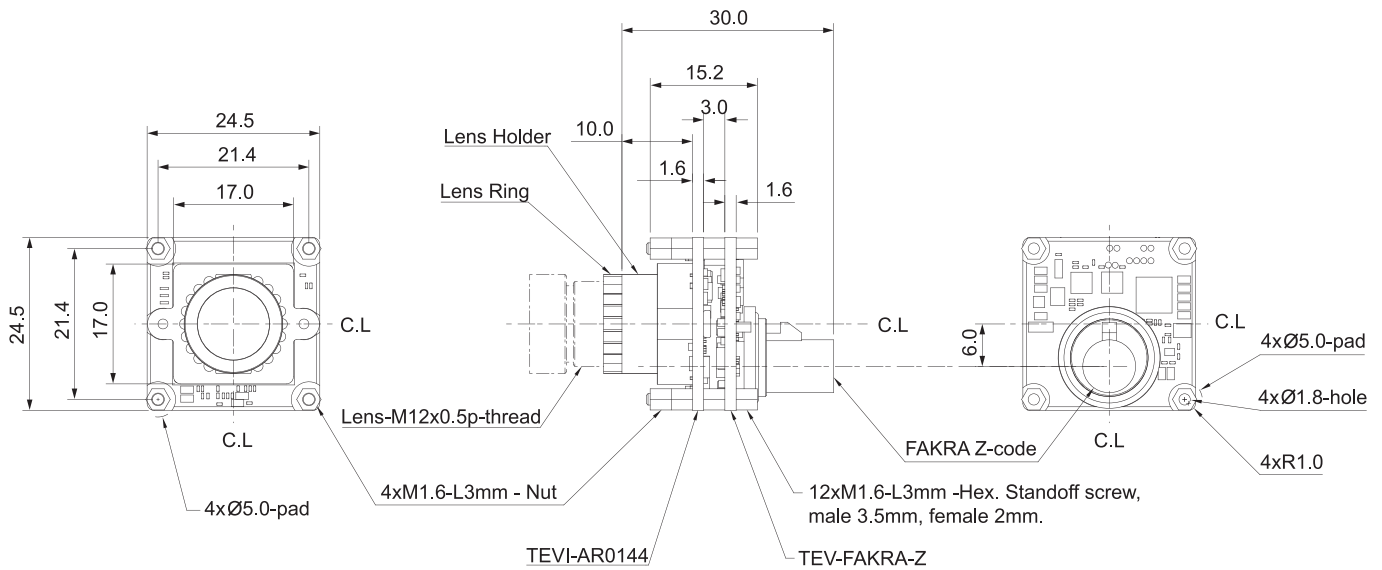
Spectral Characteristics



Block Diagram



Dimensions (units in mm)



Order Information

UVLS3-AR0144-x-Sxx-xx

Part Number Rules

| Option | Code | Description |
|--------------|------|--------------------------|
| Chromaticity | C | Color |
| Lens | S33 | S-Mount Module D-FOV 33° |
| | S83 | S-Mount Module D-FOV 83° |
| Filter | - | - |
| | IR | IR Cut Filter 650nm |

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

Optional Accessories

245-MOUNT-BRACKET

An easy to attach A-Mount bracket for TechNexion camera board modules.



245-MOUNT-BRACKET



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

Lens Information

| |  UVLS3-AR0144-C-S33-IR |  UVLS3-AR0144-C-S83-IR |
|--------------|---|---|
| Focus Type | Fixed Focus | Fixed Focus |
| Focal Length | 8 mm | 2.85 mm |
| Aperture | F1.8 | F2.8 |
| Lens D-FOV | 34.0° | 84.0° |
| Lens H-FOV | 28.2° | 75.0° |
| Lens V-FOV | 17.5° | 58.0° |
| Module D-FOV | 33.1° ± 5% | 82.6° ± 5% |
| Module H-FOV | 28.0° ± 5% | 73.5° ± 5% |
| Module V-FOV | 17.4° ± 5% | 50.3° ± 5% |
| TTL | 25.22 mm | 20 mm |
| BFL | 6.92 mm | 2.03 mm |
| MOD | 0.2 m | 0.3 m |
| Distortion | <-5.11% | < -0.35% |
| IR-Filter | 650 nm | 650 nm |

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



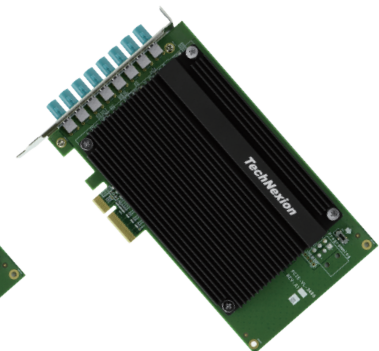
UVC-VL-3100



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