TechNexion
INNOVATORS OF TECHNOLOGY

# VLI-OV5640-CB

- OmniVision OV5640 5MP Rolling Shutter Sensor
- C-Mount for Interchangeable Lenses
- FAKRA Automotive Connector
- Plug & Play with Linux OS & Yocto




## Specifications

### Camera Information

| | |
|---|---|
| CMOS Sensor | OmniVision OV5640 |
| Active Pixels | 2592 (H) x 1944 (V) = 5MP |
| Pixel Size | 1.4 µm x 1.4 µm |
| Optical Format | 1/4” (Diagonal 4.6 mm) |
| Shutter Type | Rolling Shutter |
| Chromaticity | Color |
| Illuminated type | Back Side Illuminated (BSI) |
| Maximum Frame Rate (UYVY) | 2592 x 1944 @ 15 fps<br>1920 x 1080 @ 30 fps<br>1280 x 720 @ 60 fps<br>640 x 480 @ 60 fps |
| Maximum S/N Ratio | 36 dB |
| Output Format | UYVY |

### Camera Interface

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

### Power

| | |
|---|---|
| Supply Voltage | 12V ± 5% |
| Power Consumption | UYVY 2592 x 1944 @ 15 fps ≤ 0.9W |
| Standby Power | ≤ 0.1W Standby |

### Software Support

| | |
|---|---|
| Platform Support | x86 Intel / AMD<br>NXP i.MX8M Mini / Plus<br>NXP i.MX93<br>TI Sitara™ AM62x / AM62A<br>TI Jacinto™ TDA4VM / TDA4VA / TDA4VH<br>NVIDIA Jetson Nano<br>NVIDIA Xavier NX<br>NVIDIA Orin Nano/NX |
| Operation Systems | Linux<br>Yocto |
| SDK | VizionViewer™ SDK |

### Environmental and Mechanical

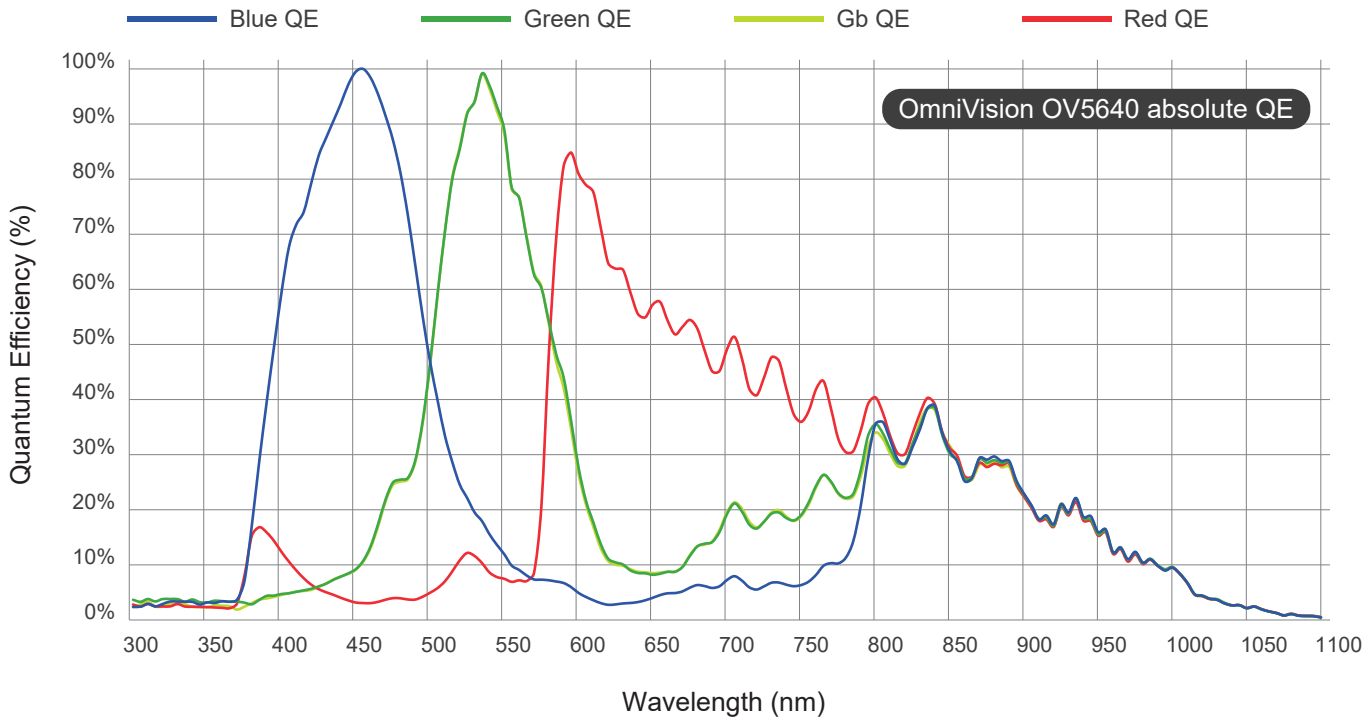
| | |
|---|---|
| Dimensions | 29.5(W) x 29.5(H) x 37.5(D) mm |
| Weight | 40 grams |
| Relative Humidity | 10 to 90 % |
| MTBF | 50,000 Hours |
| Shock | 15G half-sine 11 ms duration |
| Operating Temperature | -30°C to +70°C |
| Vibration | 1 Grms random 5-500Hz hr/axis |

### Certification and Compliance

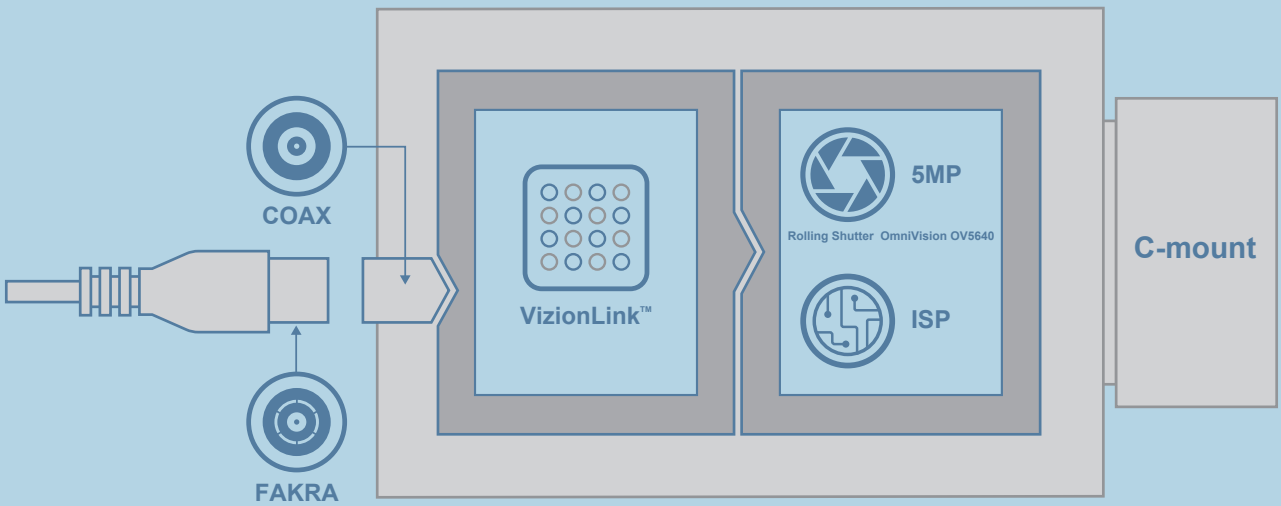
| | |
|---|---|
| Certification | Compliant with CE / FCC / RoHS / REACH directives |

2023-06-07 – All specifications are subject to change without notice. © TechNexion – All rights reserved worldwide.

## Spectral Characteristics




## Block Diagram

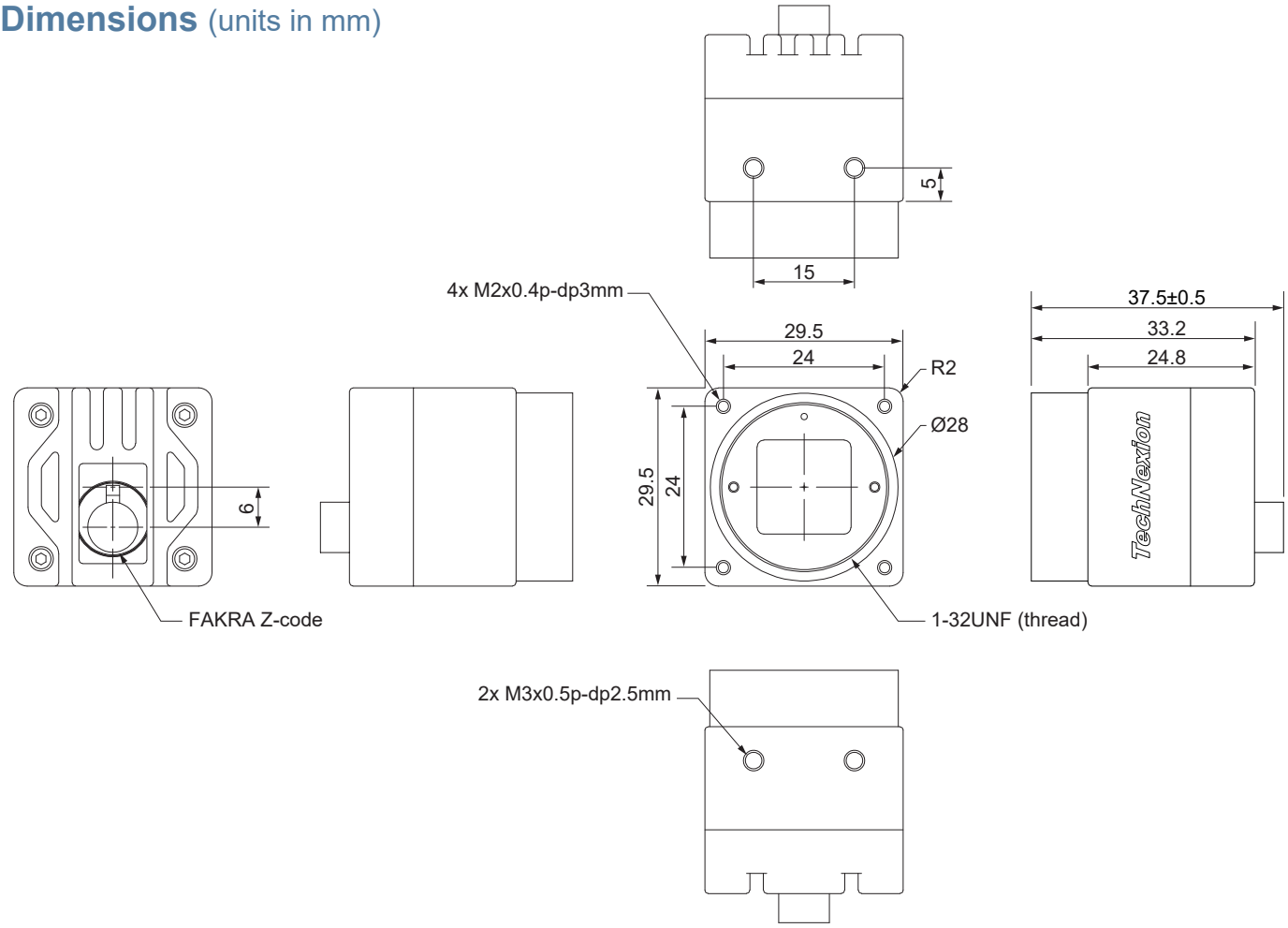



TechNexion
INNOVATORS OF TECHNOLOGY

For more information:
www.technexion.com sales@technexion.com

2023-06-07 – All specifications are subject to change without notice. © TechNexion – All rights reserved worldwide.

## Dimensions (units in mm)




## Order Information

**VLI-OV5640-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

**VCI-MOUNT-BRACKET-A**
An easy to attach A-Mount bracket for TechNexion USB3 cameras.



VCI-MOUNT-BRACKET-A




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



2023-06-07 – All specifications are subject to change without notice. © TechNexion – All rights reserved worldwide.

## 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.

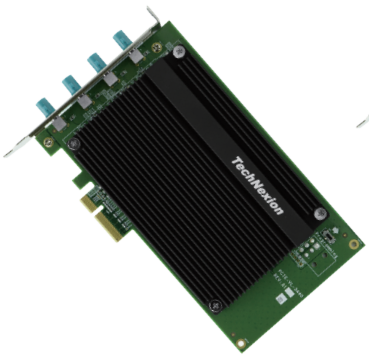
- **Available in 1 / 2 / 4 / 8 port FPD-Link III camera frame grabber configuration**
- **Fits in a standard PCI Express Gen 3 slot**
- **Plug-n-Play driver-less UVC based solution**
- **Complete Fanless design with brushed aluminium thermal solution**
- **Comes with TechNexion Vizionviewer™ SDK**



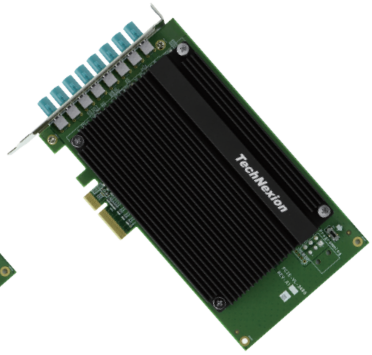

**UVC-VL-3100**



**PCIE-VL-3120**




**PCIE-VL-3440**




**PCIE-VL-3480**

TechNexion
INNOVATORS OF TECHNOLOGY

For more information:
www.technexion.com sales@technexion.com

2023-06-07 – All specifications are subject to change without notice. © TechNexion – All rights reserved worldwide.

## TEK-8021-NX / TEK-60xx-ORIN

Nvidia Jetson NX/Orin Solutions



x24



- Nvidia Xavier NX Systems
- Nvidia Orin Nano / NX Systems
- Up-to 24 FPD-Link III camera solutions
- Nvidia Jetpack driver integration
- TechNexion Vizionviewer™ SDK

## TRAQ-4VM

Texas Instruments TDA4VM Robotic AMR Solution



x8



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

## TEP6-xxx-IMX8MP

NXP i.MX8M Plus based HMI Family



x2



- NXP i.MX8M Plus HMI solution
- 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 Vizionviewer™ SDK

## TEK6-xxx-IMX8MP

NXP i.MX8M Plus based Edge Computing Gateway System



x2



- NXP i.MX8M Plus Edge Computing
- 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 Vizionviewer™ SDK

TechNexion
INNOVATORS OF TECHNOLOGY

For more information:
www.technexion.com sales@technexion.com

2023-06-07 – All specifications are subject to change without notice. © TechNexion – All rights reserved worldwide.

# Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

## TechNexion:

USBUART330TTLFTDI100 WB-IMX6Q-9377 WB-IMX6U-9377 ANTP150A138045D2450BK EDM1GNOME EDMHSCP12200501 PICOPIIMX7R10 PICOPIIMX7R10D05TOV5645