

## RZ Ecosystem Partner Solution

## TechNexion MIPI-CSI2 Camera



### Solution Summary

TechNexion Embedded Vision Camera Sensors are available from 1MP to 13MP with rolling or global shutter functionality. The best of all. All TEVS sensors are pin-to-pin compatible. These sensors are engineered to be compact, requiring minimal space yet delivering maximal functionality. Support of our TEVS Embedded Camera Sensors is available for Renesas [RZ/V2H](#) and [RZ/V2N](#) MPU evaluation kits, is equipped with a unified connector designed to facilitate effortless integration into your devices, guaranteeing a seamless integration experience. Provide various standard camera module solution for time to market.

### Features/Benefits

- Support Global Shutter to secure sharp, instantaneous captures and Rolling Shutter , cost effective, for various application.
- Built-in ISP with Image fine tuning. Like Color correction, Lens calibration, over-exposure management.
- Lens Options support standard Lens S-Mount interface with interchangeable lenses, offering versatile solutions tailored to various applications.
- MIPI Interface enable connect to SoC and able config to support 2/4 Lane for different SoC.
- Temperature range -30 to +70 degree Celsius

### Diagrams/Graphics



TechNexion EVK RP122

| < 2 MP                                                                                                               | 5 MP                                                                                                                       | 8 MP                                                                                                                         | 10 ~ 20 MP                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
|  <b>AR0144</b><br>Global<br>Color |  <b>AR0521</b><br>Rolling<br>Color      |  <b>AR0821</b><br>Rolling<br>Color      |  <b>AR1335</b><br>Rolling<br>Color |
|  <b>AR0145</b><br>Global<br>Mono  |  <b>AR0522</b><br>Rolling<br>Color/Mono |  <b>AR0822</b><br>Rolling<br>Color/Mono |                                                                                                                         |
|  <b>AR0234</b><br>Global<br>Color |                                                                                                                            |  <b>AR0830</b><br>Rolling<br>Color/Mono |                                                                                                                         |
|  <b>AR0235</b><br>Global<br>Mono  |                                                                                                                            |                                                                                                                              |                                                                                                                         |

### Target Markets and Applications

- Smart City / IoT
- Automotive / e-cockpit
- Smart Agriculture
- Robotics / Drones

## Product Information



TEVS-AR1335-C-S85-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR1335 |
| Shutter      | Rolling       |
| Megapixels   | 13MP          |
| Chromaticity | Color         |
| Interface    | RPI22         |
| Module DFOV  | 85.0°         |

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TEVS-AR0822-C-S150-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Color         |
| Interface    | RPI22         |
| Module DFOV  | 150.0°        |

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TEVS-AR0822-M-S150-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Monochrome    |
| Interface    | RPI22         |
| Module DFOV  | 150.0°        |

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TEVS-AR0822-M-S72-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Monochrome    |
| Interface    | RPI22         |
| Module DFOV  | 72.0°         |

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TEVS-AR0822-C-S42-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Color         |
| Interface    | RPI22         |
| Module DFOV  | 42.0°         |

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TEVS-AR0822-M-S42-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Monochrome    |
| Interface    | RPI22         |
| Module DFOV  | 42.0°         |

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TEVS-AR0822-C-S108-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Color         |
| Interface    | RPI22         |
| Module DFOV  | 108.0°        |

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TEVS-AR0822-M-S108-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Monochrome    |
| Interface    | RPI22         |
| Module DFOV  | 108.0°        |

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TEVS-AR0822-C-S72-IR-RPI22

|              |               |
|--------------|---------------|
| Sensor       | onsemi AR0822 |
| Shutter      | Rolling       |
| Megapixels   | 8MP           |
| Chromaticity | Color         |
| Interface    | RPI22         |
| Module DFOV  | 72.0°         |

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