

## V CXU-22C.R

USB 3.0, 2,1 Megapixel, Color

Article number: 11184369

### Overview

- 1920 x 1080 px
- Sony IMX290
- 1/2.8" CMOS
- 138 fps
- USB 3.0



Picture similar



### Technical data

#### Sensor information

|               |   |
|---------------|---|
| Sensor        | Sony IMX290                             |
| Mono/Color    | Color                                   |
| Sensor type   | 1/2.8" CMOS                             |
| Shutter type  | Rolling shutter<br>Global reset shutter |
| Resolution    | 1920 × 1080 px                          |
| Pixel size    | 2.9 × 2.9 μm                            |
| Exposure time | 0.015 ... 60000 ms                      |

#### Acquisition formats

|   |   |
|---|---|
| Image formats, interface frame rate max.                | Full Frame, 1920 × 1080 px, max. 138 fps<br>Binning 2×2, 960 × 540 px, max. 138 fps<br>Binning 2×1, 960 × 1080 px, max. 138 fps<br>Binning 1×2, 1920 × 540 px, max. 138 fps |
| Image formats, acquisition frame rate max. (Burst Mode) | Full Frame, 1920 × 1080 px, max. 60 fps   |
| Pixel formats   | BayerRG8<br>BayerRG10<br>BayerRG12<br>BayerRG12 Packed<br>Mono8<br>Mono10<br>Mono12<br>Mono12 Packed  |

#### Image preprocessing

|                 |   |
|-----------------|---|
| Analog controls | Gain (0 ... 48 dB)<br>Offset (0 ... 255 LSB 12 Bit) |
|-----------------|---|

#### Image preprocessing

|              |                                 |
|--------------|---------------------------------|
| Color models | Mono<br>Raw Bayer<br>RGB<br>BGR |
|--------------|---------------------------------|

#### Camera features

|                         |   |
|-------------------------|---|
| Basic Functions         | Exposure<br>Gain / Color Gain<br>Trigger / Exposure Active (Flash)<br>Binning 2x2<br>Partial Scan<br>Offset<br>Free Running Mode (Live Image) |
| Auto Functions          | Exposure Auto<br>Gain Auto<br>White Balance Auto<br>Color Transformation Auto   |
| Image Pre-processing    | Image Flipping (X/Y)<br>Color Processing (RGB, BGR, Mono)<br>Color Enhancement (with optimized ColorTransformationMatrix)<br>LUT / Gamma      |
| Acquisition / Interface | Burst Mode<br>Adjustable Framerate<br>Device Link Throughput Limit<br>Internal Image Buffer   |
| Synchronization         | free running<br>trigger   |
| Trigger sources         | Hardware<br>Software  |

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## Technical data

### Camera features

|                         |  |
|-------------------------|--|
| Trigger delay           | 0 ... 2 sec, tracking and buffering of up to 256 trigger signals   |
| Process Synchronization | Events<br>Timer<br>Trigger Delay<br>Debouncer<br>Counter<br>Trigger via Action CMD (GigE)<br>Additional Output Modes (e.g. Trigger Ready)<br>Chunk data inside transferred image<br>Encoder support via Counter End trigger source |
| Additional Functions    | User Set<br>Integrated temperature sensor<br>Readable additional information (e.g. sensor information)<br>Save Custom Data   |
| Internal image buffer   | 469 MB<br>79 images (Trigger Mode)<br>1 image (Free Running Mode)  |

### Interfaces and connectors

|                   |  |
|-------------------|--|
| Data interface    | USB 3.0, Transfer Rate 5000 Mbits/sec,<br>Connector: USB 3.0 Micro B |
| Process interface | M8 / 8 pins (SACC-DSI-M8MS-8CON-M8-L180)                             |
| Power supply      | via USB 3.0 interface  |

### Mechanical data

|            |   |
|------------|---|
| Lens mount | C-mount   |
| Width      | 29 mm   |
| Height     | 29 mm   |
| Depth      | 38 mm   |
| Weight     | ≤ 90 g  |
| Material   | zinc die casting, baked varnish (until 02-2020 nickel-chrome-plated), IP 40 |

### Electrical data

|                   |                              |
|-------------------|------------------------------|
| Power consumption | Approx. 2.8 W @ 138 fps      |
| Operating voltage | 5 VDC (via USB3.0 interface) |

### Non-volatile memory

|                   |        |
|-------------------|--------|
| Flash memory size | 128 kB |
|-------------------|--------|

### Environmental conditions

|                       |                                     |
|-----------------------|-------------------------------------|
| Operating temperature | 0 ... +65 ° @ T = measurement point |
| Humidity              | 10 ... 90 % (non-condensing)        |
| Protection class      | IP 40                               |

### Digital I/Os

|       |  |
|-------|--|
| Lines | 1 input line<br>1 output line<br>2 general purpose lines |
|-------|--|

### Conformity

|            |                   |
|------------|-------------------|
| Conformity | CE<br>RoHS<br>EAC |
|------------|-------------------|

## Dimension drawing

