

#### overview

- 1920 × 1080 px
- Sony IMX290
- 1/2" CMOS
- 138 fps
- USB 3.0
- available



#### technical data

##### sensor information

|               |                                         |
|---------------|-----------------------------------------|
| sensor        | Sony IMX290                             |
| resolution    | 1920 × 1080 px                          |
| exposure time | 0,015 ... 60000 ms                      |
| pixel size    | 2.9 × 2.9 µm                            |
| shutter type  | Rolling shutter<br>Global reset shutter |
| sensor type   | 1/2" CMOS                               |

##### 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 |
| pixel formats                            | Mono8<br>Mono10<br>Mono12<br>Mono12 Packed                                                                                                                                  |

##### image preprocessing

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| analog controls | Gain (0 ... 48 dB)<br>Offset (0 ... 255 LSB 12 Bit) |
| color models    | Mono                                                |

##### camera features

|                 |                         |
|-----------------|-------------------------|
| synchronization | free running<br>trigger |
| trigger sources | Hardware<br>software    |

##### camera features

|                       |                                                                   |
|-----------------------|-------------------------------------------------------------------|
| trigger delay         | 0 ... 2 sec, tracking and buffering of up to 256 trigger signals  |
| 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, nickel-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 | +5 ... +65 °C @ T = measurement point |
| humidity              | 10 ... 90 % (non-condensing)          |
| protection class      | IP 40                                 |

## technical data

### digital I/Os

|       |                         |
|-------|-------------------------|
| lines | 1 input line            |
|       | 1 output line           |
|       | 2 general purpose lines |

### conformity

|            |      |
|------------|------|
| conformity | CE   |
|            | RoHS |
|            | EAC  |

## dimension drawing

