

**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                            | 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**

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

**technical data**

**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                                 |

**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**

