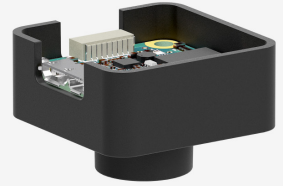


In series

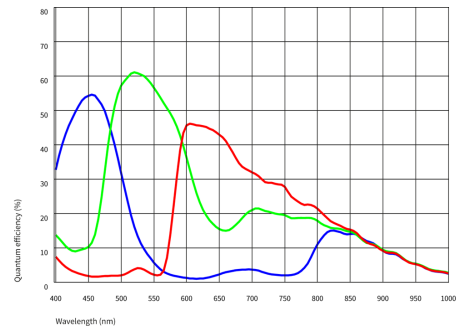
The model is in series and available for the long term.



Specification

Sensor

| | |
|---|----------------------|
| Sensor type | CMOS Color |
| Shutter | Global Shutter |
| Sensor characteristic | Linear |
| Readout mode | Progressive scan |
| Pixel Class | 5 MP |
| Resolution | 5.10 Mpix |
| Resolution (h x v) | 2472 x 2062 Pixel |
| Aspect ratio | 5:4 |
| ADC | 12 bit |
| Color depth (camera) | 12 bit |
| Optical sensor class | 1/1.8" |
| Optical Size | 6.773 mm x 5.650 mm |
| Optical sensor diagonal | 8.82 mm (1/1.81") |
| Pixel size | 2.74 μm |
| Micro lens shift | 0.00 |
| Manufacturer | Sony |
| Sensor Model | IMX568-AAQJ-C |
| Gain (master/RGB) | 15.9x/- |
| AOI horizontal | same frame rate |
| AOI vertical | increased frame rate |
| AOI image width / step width | 600 / 48 |
| AOI image height / step width | 14 / 8 |
| AOI position grid (horizontal/vertical) | 8 / 8 |
| Binning horizontal | - |
| Binning vertical | - |
| Binning method | - |
| Binning factor | - |
| Subsampling horizontal | increased frame rate |
| Subsampling vertical | increased frame rate |
| Subsampling method | Color |
| Subsampling factor | 2 |



Subject to technical modifications (2024-05-20)

Model

| | |
|---|--------------------|
| Frame rate freerun mode (in 8-bit mode) | 49 fps |
| Frame rate trigger (continuous) | 50 fps |
| Frame rate trigger (maximum) | 50 fps |
| Exposure time (minimum - maximum) | 0.009 ms - 2000 ms |
| Power consumption | 0.5 W - 1.2 W |

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.
For PCB versions, refer to the separate hints in the respective documentation.

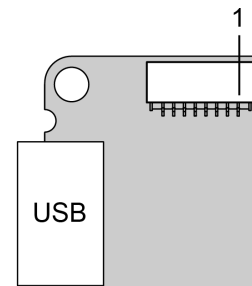
| | |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F |
| Device temperature during storage | -20 °C - 80 °C / -4 °F - 176 °F |
| Humidity (relative, non-condensing) | 20 % - 80 % |

Connectors

| | |
|---------------------|-----------------|
| Interface connector | USB 3.0 micro-B |
| I/O connector | 8-pin connector |
| Power supply | USB cable |

Pin assignment I/O connector

| | |
|---|--|
| 1 | Voltage output 3.3 V |
| 2 | Ground (GND) |
| 3 | Flash output without optocoupler - Line 1 |
| 4 | Trigger input without optocoupler - Line 0 |
| 5 | General Purpose I/O (GPIO) 1 - Line 2 |
| 6 | General Purpose I/O (GPIO) 2 - Line 3 |
| 7 | Ground (GND) |
| 8 | USB Power: 5 V, max. 400 mA |



Design

| | |
|------------------|-----------------------------|
| Lens Mount | S-Mount |
| IP code | - |
| Dimensions H/W/L | 32.5 mm x 32.5 mm x 14.0 mm |
| Mass | 10 g |

Features

Image Acquisition

| | |
|-----------------------------|---|
| Freerun | ✓ |
| Software trigger | ✓ |
| Hardware trigger | ✓ |
| Trigger controlled exposure | - |
| Denoisier | - |
| Long exposure | - |
| Line scan | - |
| Line scan highspeed | - |

Flashing

| | |
|--------------|---|
| Flashing | ✓ |
| PWM flashing | - |

Image Adjustments

| | |
|-------------------|-----|
| Auto exposure | - |
| Auto gain | - |
| Auto whitebalance | - |
| Color correction | - |
| Gamma | - |
| LUT | - |
| Mirror/flip | X/Y |

On-board Image Processing

| | |
|---------------------|--|
| Pixel formats | BayerRG8 BayerRG10g40IDS BayerRG12g24IDS |
| Region of interest | ✓ |
| Decimation (FPGA) | - |
| Decimation (Sensor) | 2x2 |
| Binning (FPGA) | - |
| Binning (Sensor) | - |

Others

| | |
|--------------------------------|------|
| Chunks | - |
| Sequencer | - |
| Events | - |
| Firmware update | ✓ |
| 1st supported firmware version | 3.21 |