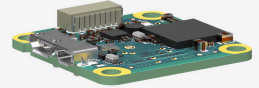
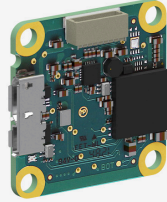
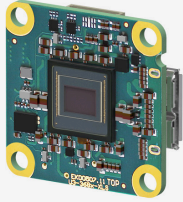


In series

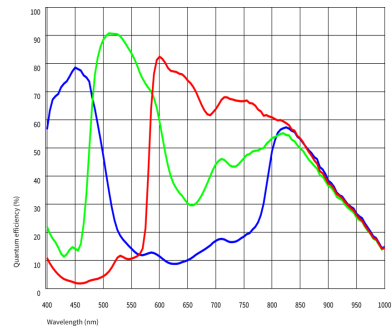
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	13 MP
Resolution	12.62 Mpix
Resolution (h x v)	3552 x 3552 Pixel
Aspect ratio	1:1
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.104 mm x 7.104 mm)
Optical sensor diagonal	10.05 mm (1/1.59")
Pixel size	2 μm
Manufacturer	Sony
Sensor Model	IMX676-AACR1-C
Gain (master/RGB)	31.6x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	1056 / 48
AOI image height / step width	956 / 4
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	-
Binning factor	-
Subsampling horizontal	-
Subsampling vertical	-
Subsampling method	-
Subsampling factor	-



Model

Frame rate freerun mode	17 fps
Frame rate trigger (maximum)	-
Exposure time (minimum - maximum)	0.031 ms - 2000 ms
Power consumption	1 W - 1.3 W

Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

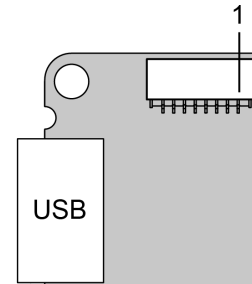
Allowed device temperature during operation	0 °C - 75 °C / 32 °F - 167 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

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	-
IP code	-
Dimensions H/W/L	29.0 mm x 29.0 mm x 6.4 mm
Mass	5 g

Features

Image Acquisition

Freerun	✓
Software trigger	✓
Hardware trigger	-
Trigger controlled exposure	-
Denoiser	-
Long exposure	-
Line scan	-
Line scan highspeed	-
Global start	-

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	BayerRG10g40IDS BayerRG12g24IDS
Region of interest	✓
Decimation (FPGA)	-
Decimation (Sensor)	-
Binning (FPGA)	-
Binning (Sensor)	2x2 Horizontal and vertical binning can only be applied jointly.

Others

Chunks	-
Sequencer	-
Events	-
Firmware update	✓
1st supported firmware version	3.34