

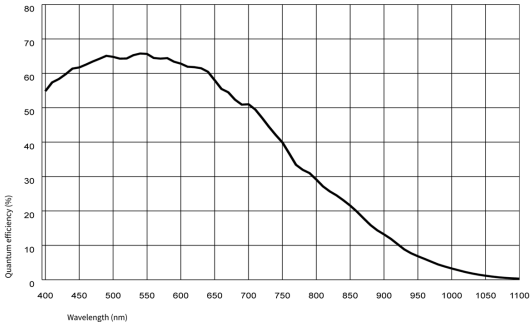
In series
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
Pixel Class	2 MP
Resolution	2.30 Mpix
Resolution (h x v)	1920 x 1200 Pixel
Aspect ratio	16:10
ADC	10 bit
Color depth (camera)	10 bit
Optical sensor class	1/2.6"
Optical Size	5.760 mm x 3.600 mm
Optical sensor diagonal	6.79 mm 1/2.6"
Pixel size	3 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Onsemi
Sensor Model	AR0234CSSM00SUKA0
Gain (master/RGB)	15.1x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	48 / 12
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: addition / Vertical: addition
Binning factor	2x2
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	M/C automatic



Model

Frame rate freerun mode	101 fps
Frame rate trigger (continuous)	100 fps
Frame rate trigger (maximum)	100 fps
Exposure time (minimum - maximum)	0.012 ms - 446 ms
Power consumption	0.5 W - 1 W
Image memory	-

Ambient conditions

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

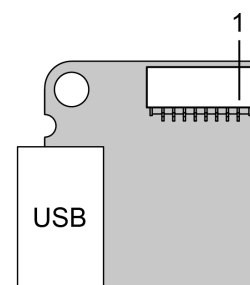
Allowed device temperature during operation	0 °C - 85 °C / 32 °F - 185 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 3.0 micro-B
I/O connector	8-pin Wuerth 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	13 g
Housing material	-

Features

List of on-camera image pre-processing features.

All features of the table are available via our IDS peak software for image pre-processing on the host computer (sensor model dependent).

Image Acquisition

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

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	Mono8 Mono10g40IDS
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	
	Binning (FPGA)	-
	Binning (Sensor)	2x2 Increases frame rate.
Others	Chunks	-
	Sequencer	-
	Events	-
	Firmware update	✓
	1st supported firmware version	3.2