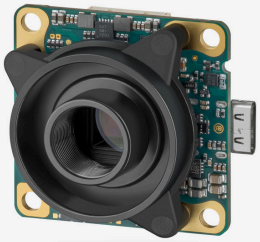
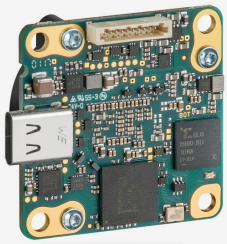
Not recommended for new designs

The camera model is no longer recommended for new application development.

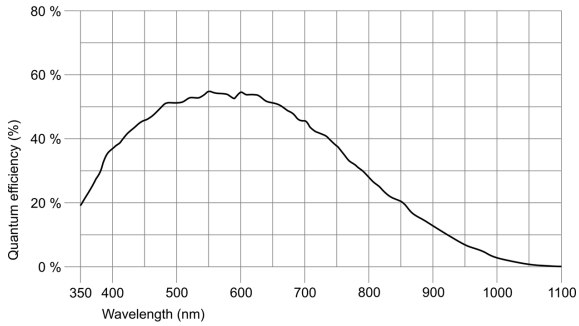




Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter
Sensor characteristic	Linear
Readout mode	-
Pixel Class	0.5 MP
Resolution	0.49 Mpix
Resolution (h x v)	808 x 608 Pixel
Aspect ratio	4:3
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/3.6""
Optical Size	3.878 mm x 2.918 mm
Optical sensor diagonal	4.85 mm 1/3.6"
Pixel size	4.8 µm
Manufacturer	Onsemi
Sensor Model	NOIP1SN0480A-SDI
Gain (master/RGB)	4x/4x
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	120 / 8
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	8 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	M/C automatic
Decimation (subsampling) factor	2



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Model

Pixel clock range	30 MHz - 80 MHz
Frame rate freerun mode	135 fps
Frame rate trigger (continuous)	135 fps
Frame rate trigger (maximum)	135 fps
Exposure time (minimum - maximum)	0.046 ms - 967 ms
Long exposure (maximum)	5000 ms
Power consumption	1 W - 1.5 W
Image memory	-
Special features	Overlap trigger Sensor source gain Multi-AOI

Ambient conditions

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

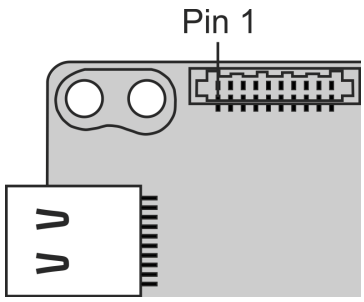
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB Type-C
I/O connector	10-pin Molex connector (IllumiMate)
Power supply	USB cable

Pin assignment I/O connector

1	Voltage output (USB Power Delivery), 5-15 V
2	Ground (GND)
3	General Purpose I/O (GPIO) 2, 3.3 V
4	General Purpose I/O (GPIO) 1, 3.3 V
5	TWI (Two Wire Interface) clock signal
6	TWI (Two Wire Interface) data signal
7	Trigger input without optocoupler 3.3 V
8	Flash output without optocoupler 3.3 V
9	Ground (GND)
10	Voltage output 3.3 V



Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	36.0 mm x 36.0 mm x 19.9 mm
Mass	14 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).

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UI-3131LE-M-GL (AB00895)

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	-
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	4.82

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