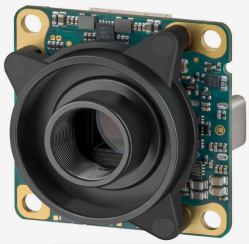
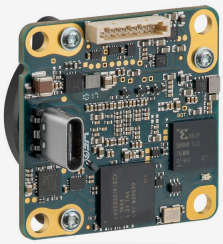
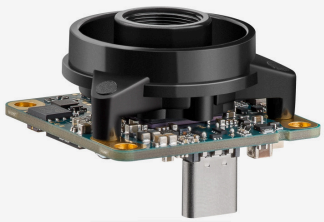
UI-3131LE-C-HQ-VU (AB02195)

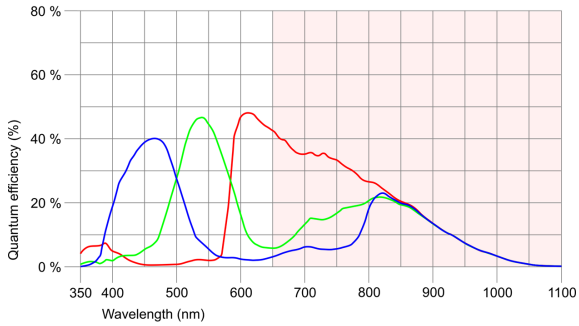
Not recommended for new designs
The camera model is no longer recommended for new application development.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Global Shutter
Sensor characteristic	Linear
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
CRA (Chief Ray Angle)	1.7 °
Manufacturer	Onsemi
Sensor Model	NOIP1SE0480A-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



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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.

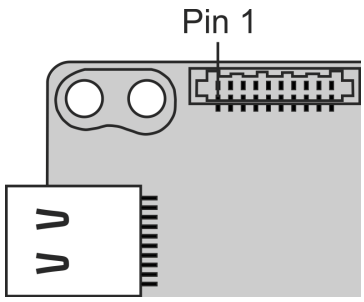
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

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 26.3 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-C-HQ-VU (AB02195)

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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