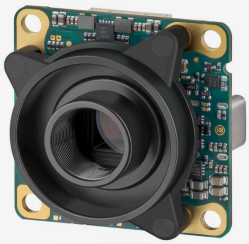
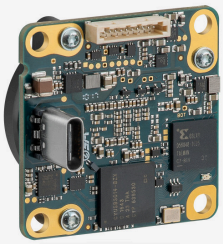
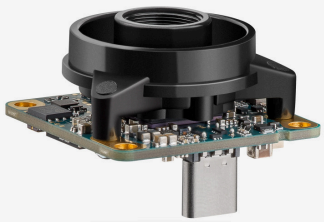
UI-3881LE-C-HQ-VU (AB02161)

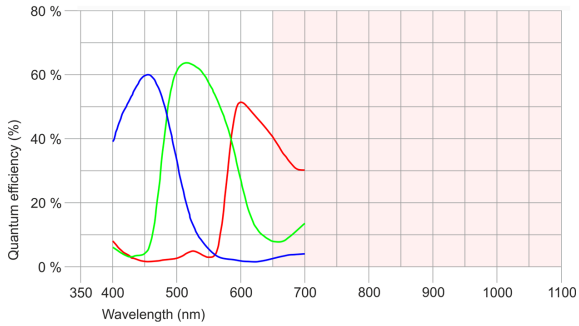
Not recommended for new designs
The camera model is no longer recommended for new application development.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Pixel Class	6 MP
Resolution	6.41 Mpix
Resolution (h x v)	3088 x 2076 Pixel
Aspect ratio	3:2
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.411 mm x 4.982 mm
Optical sensor diagonal	8.93 mm 1/1.8"
Pixel size	2.4 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX178LQJ-C
Gain (master/RGB)	14.5x/5x
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	88 / 8
AOI image height / step width	28 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-



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Model

Pixel clock range	20 MHz - 474 MHz
Frame rate freerun mode	58 fps
Frame rate trigger (continuous)	58 fps
Frame rate trigger (maximum)	58 fps
Exposure time (minimum - maximum)	0.013 ms - 999 ms
Long exposure (maximum)	120000 ms
Power consumption	0.7 W - 1.6 W
Image memory	-
Special features	Overlap trigger Sensor source gain

Ambient conditions

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

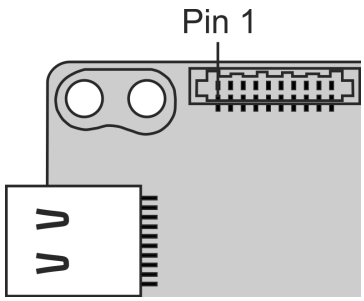
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 80 °C / -4 °F - 176 °F
Humidity (relative, non-condensing)	20 % - 80 %

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	16 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-3881LE-C-HQ-VU (AB02161)

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