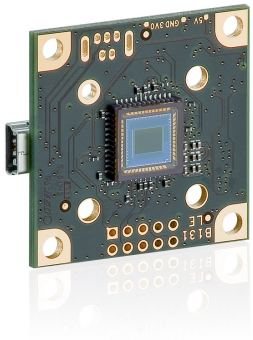
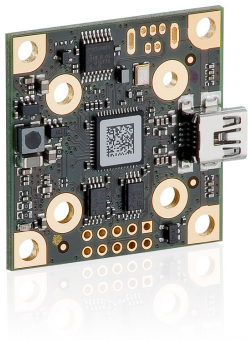
UI-1642LE-C



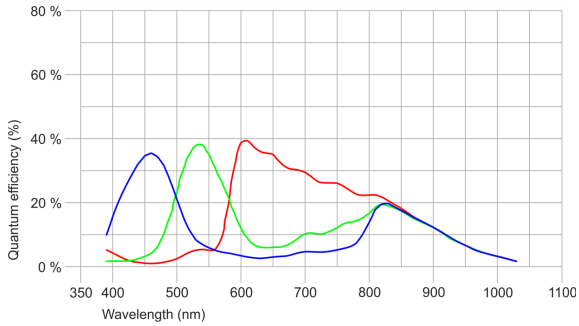


Made in Germany

Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	SXGA
Resolution	1.31 Mpix
Resolution (h x v)	1280 x 1024 Pixel
Aspect ratio	5:4
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/3"
Optical Size	4.608 mm x 3.686 mm
Optical sensor diagonal	5.9 mm (1/2.71")
Pixel size	3.6 µm
Manufacturer	ON Semiconductor
Sensor Model	MT9M131STC
Gain (master/RGB)	4.3x/3.1x
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image witdh / step width	32 / 4
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	-
Binning vertical	-
Binning method	-
Binning factor	-
Subsampling horizontal	increased frame rate
Subsampling vertical	increased frame rate
Subsampling method	Color
Subsampling factor	2, 4



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Model

Pixel clock range	5 MHz - 40 MHz
Frame rate freerun mode	25.0 fps
Frame rate trigger (maximum)	24.9 fps
Exposure time (minimum - maximum)	0.037 ms - 10122 ms
Power consumption	0.3 W - 0.8 W

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

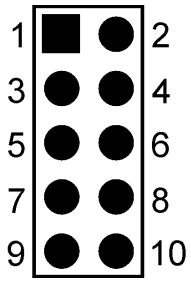
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 2.0 mini-B
I/O connector	10-pin plated-through holes
Power supply	USB cable

Pin assignment I/O connector

1	USB Power supply (VCC) 5 V
2	USB Ground (GND)
3	Trigger input without optocoupler (+)
4	Flash output without optocoupler (+)
5	Power supply (internal voltage transformer), 3.3 V or 3.0 V (sensor-dependent)
6	USB Ground (GND)
7	General Purpose I/O (GPIO) 1
8	General Purpose I/O (GPIO) 2
9	I2C bus clock signal
10	I2C bus data signal



Design

Lens Mount	-
IP code	-
Dimensions H/W/L	36.0 mm x 36.0 mm x 5.7 mm
Mass	12 g

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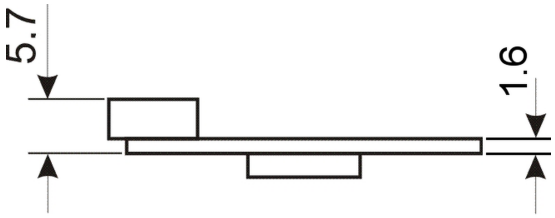

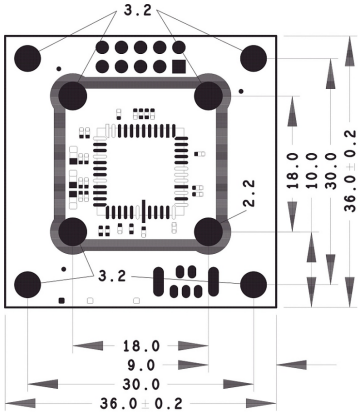

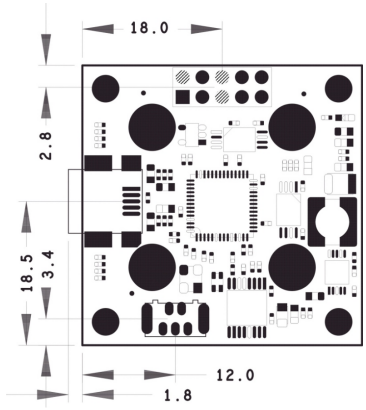

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