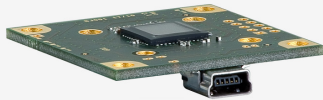
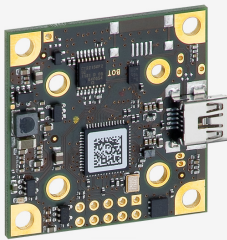
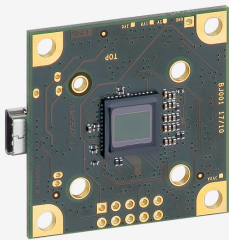


In series

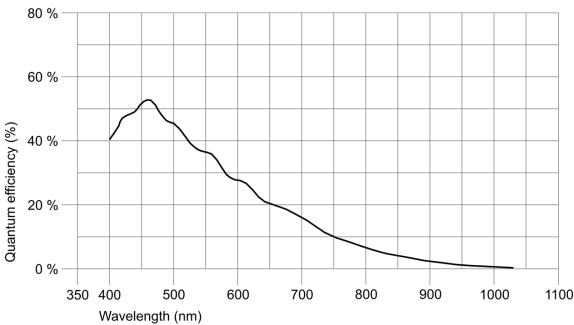
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Readout mode	Progressive scan
Pixel Class	10 MP
Resolution	10.55 Mpix
Resolution (h x v)	3840 x 2748 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	8 bit
Optical sensor class	1/2"
Optical Size	6.413 mm x 4.589 mm
Optical sensor diagonal	7.89 mm (1/2.03")
Pixel size	1.67 μ m
Micro lens shift	0.00
Manufacturer	Onsemi
Sensor Model	MT9J003STM
Gain (master/RGB)	8.5x/-
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	448 / 4
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	Color
Binning factor	2
Subsampling horizontal	increased frame rate
Subsampling vertical	increased frame rate
Subsampling method	Color
Subsampling factor	2, 4



Subject to technical modifications (2024-05-15)

Model

Pixel clock range	5 MHz - 36 MHz
Frame rate freerun mode (in 8-bit mode)	3.2 fps
Frame rate trigger (maximum)	3.2 fps
Exposure time (minimum - maximum)	0.340 ms - 14582 ms
Power consumption	0.5 W - 1.3 W

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.
For PCB versions, refer to the separate hints in the respective documentation.

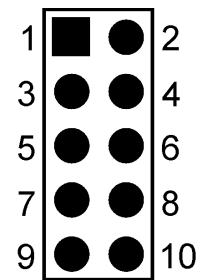
Device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

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