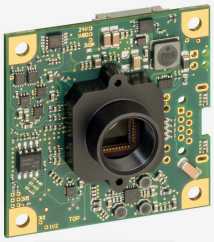
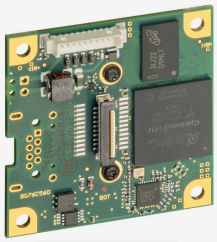
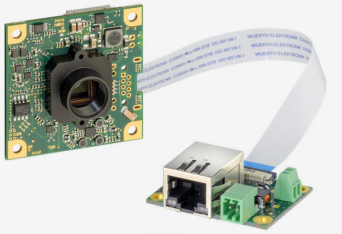
UI-5241LE-NIR-MB Rev.1.2 (AB10259)

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





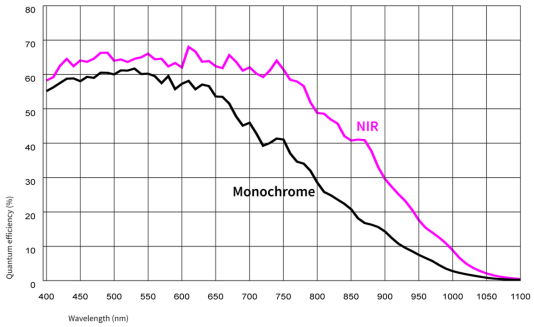


Daugtherboard and flex ribbon cable shown are optional accessories

Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter / Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Pixel Class	1.3 MP
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	1/1.8"
Optical Size	6.784 mm x 5.427 mm
Optical sensor diagonal	8.69 mm 1/1.8"
Pixel size	5.3 µm
CRA (Chief Ray Angle)	12 °
Manufacturer	e2v
Sensor Model	EV76C661ABT
Gain (master/RGB)	4x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	16 / 4
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	2 / 2
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	Horizontal: addition / Vertical: mean
Binning factor	2
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-



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Model

Pixel clock range	7 MHz - 71 MHz
Frame rate freerun mode	50 fps
Frame rate trigger (maximum)	48 fps
Exposure time (minimum - maximum)	0.009 ms - 2000 ms
Power consumption	2.2 W - 2.9 W
Image memory	60 MB
Special features	Linescan mode Scaler Sequencer Log mode Sensor hot pixel correction Fine exposure Multi-AOI

Ambient conditions

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

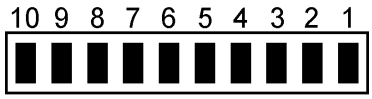
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	ZIF
I/O connector	10-pin Molex connector (Pico Blade)
Power supply	12 V - 24 V

Pin assignment I/O connector

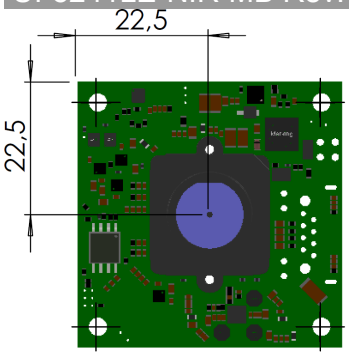
1	Ground (GND)
2	Vout 3.1 V max. 100 mA
3	Trigger input without optocoupler
4	Flash output without optocoupler
5	General Purpose I/O (GPIO) 1
6	General Purpose I/O (GPIO) 2
7	I2C bus clock signal
8	I2C bus data signal
9	Vin+ 12 V (160 mA) - 24 V (90 mA)
10	Vin- (GND)

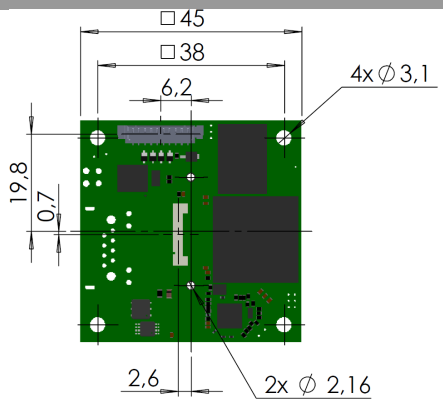


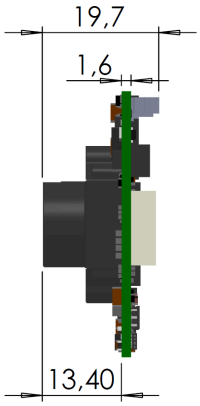
Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	45.0 mm x 45.0 mm x 19.7 mm
Mass	24 g
Housing material	-

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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).

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	-

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On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	
	Binning (FPGA)	-

Others	Chunks	-
	Sequencer	✓
	Firmware update	-
	1st supported firmware version	4.96.1

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