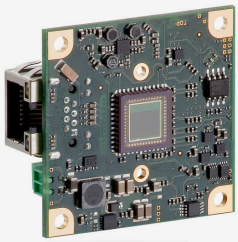
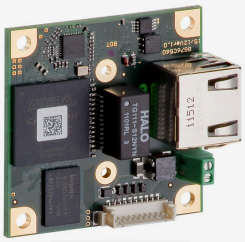
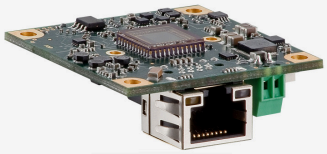
UI-5242LE-NIR Rev.1.2 (AB10168)

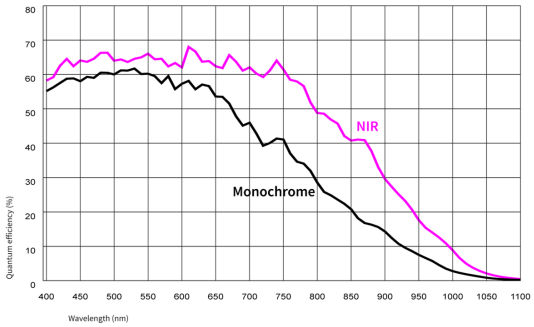
Not recommended for new designs
The camera model is no longer recommended for new application development.

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.

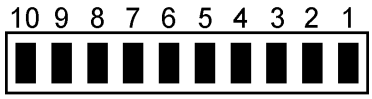
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45
I/O connector	10-pin Molex connector (Pico Blade)
Power supply	12 V - 24 V

Pin assignment I/O connector

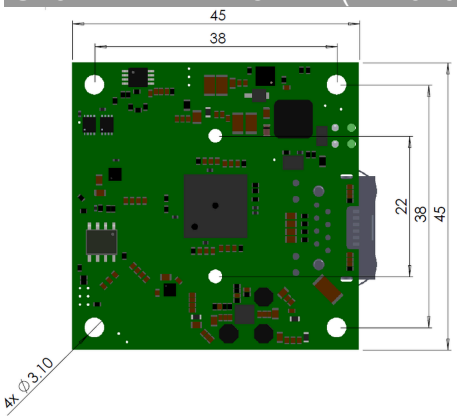
1	Ground (GND)
2	Vout 3.1 V max. 100 mA
3	Trigger input without optocoupler
4	Flash output without optocoupler
5	General Purpose I/O (GPIO) 1
6	General Purpose I/O (GPIO) 2
7	I2C bus clock signal
8	I2C bus data signal
9	Vin+ 12 V (160 mA) - 24 V (90 mA)
10	Vin- (GND)

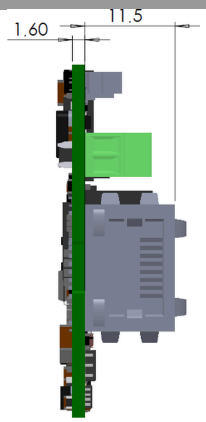


Design

Lens Mount	No mount
IP code	-
Dimensions H/W/L	45.0 mm x 45.0 mm x 13.0 mm
Mass	10 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	-
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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