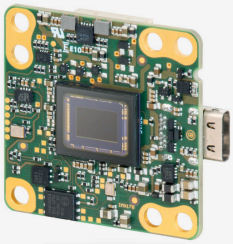
# U3-3862LE-M Rev.1.2 (AB03461)

**Discontinued**
The model has been discontinued.

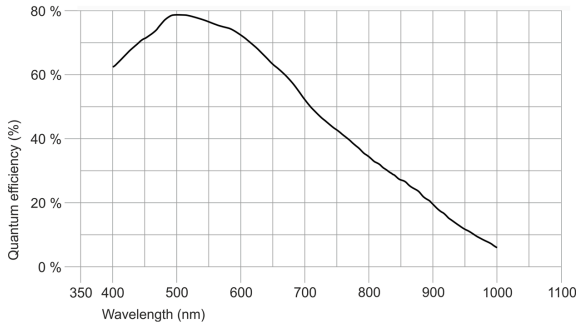




## Specification

### Sensor

| | |
|---|---|
| Sensor type | CMOS Mono |
| Shutter | Rolling shutter |
| Sensor characteristic | Linear |
| Pixel Class | 2 MP |
| Resolution | 2.12 Mpix |
| Resolution (h x v) | 1936 x 1096 Pixel |
| Aspect ratio | 16:9 |
| ADC | 12 bit |
| Color depth (camera) | 12 bit |
| Optical sensor class | 1/2.8" |
| Optical Size | 5.614 mm x 3.178 mm |
| Optical sensor diagonal | 6.45 mm 1/2.8" |
| Pixel size | 2.9 µm |
| CRA (Chief Ray Angle) | 0 ° |
| Manufacturer | Sony |
| Sensor Model | IMX290LLR-C |
| Gain (master/RGB) | 13.8x/- |
| AOI horizontal | same frame rate |
| AOI vertical | increased frame rate |
| AOI image width / step width | 256 / 2 |
| AOI image height / step width | 1 / 1 |
| AOI position grid (horizontal/vertical) | 2 / 1 |
| Binning horizontal | - |
| Binning vertical | - |
| Binning method | Horizontal: - / Vertical: - |
| Binning factor | - |
| Decimation (subsampling) horizontal | - |
| Decimation (subsampling) vertical | - |
| Decimation (subsampling) method | M/C automatic |





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## Model

| | |
|---|---|
| Frame rate freerun mode | 134 fps |
| Frame rate trigger (continuous) | 67 fps |
| Frame rate trigger (maximum) | 67 fps |
| Exposure time (minimum - maximum) | 0.011 ms - 1736 ms |
| Long exposure (maximum) | 120000 ms |
| Power consumption | 0.7 W - 1.4 W |
| Image memory | - |

## Ambient conditions

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

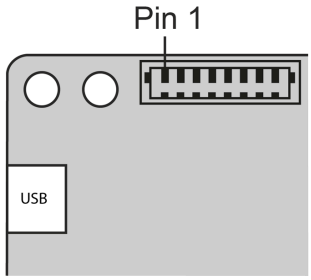
| | |
|---|---|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F |
| Allowed device temperature during storage | -20 °C - 80 °C / -4 °F - 176 °F |
| Humidity (relative, non-condensing) | 20 % - 80 % |

## Connectors

| | |
|---|---|
| Interface connector | USB Type-C |
| I/O connector | 10-pin Wuerth connector (WR-WTB 1.00 mm) |
| Power supply | USB cable |

## Pin assignment I/O connector

| | |
|---|---|
| 1 | Voltage output 5 V, max. 400 mA |
| 2 | Ground (GND) |
| 3 | General Purpose I/O (GPIO) 2, 3.3 V - Line 3 |
| 4 | General Purpose I/O (GPIO) 1, 3.3 V - Line 2 |
| 5 | I2C clock signal - requires USB3 Vision Firmware 3.2 or higher |
| 6 | I2C data signal - requires USB3 Vision Firmware 3.2 or higher |
| 7 | Trigger input without optocoupler 3.3 V - Line 0 |
| 8 | Flash output without optocoupler 3.3 V - Line 1 |
| 9 | Ground (GND) |
| 10 | Voltage output 3.3 V |




## Design

| | |
|---|---|
| Lens Mount | No mount |
| IP code | - |
| Dimensions H/W/L | 36.0 mm x 36.0 mm x 8.6 mm |
| Mass | 9 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).

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


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| | | |
|---|---|---|
| Flashing | Flashing | ✓ |
| | PWM flashing | - |
| Image Adjustments | Auto exposure | - |
| | Auto gain | - |
| | Auto whitebalance | - |
| | Color correction | - |
| | Gamma | - |
| | LUT | - |
| | Mirror/flip | X/Y |
| On-board Image Processing | Pixel formats | Mono8<br>Mono10<br>Mono10p<br>Mono12<br>Mono12p |
| | Region of interest | ✓ |
| | Decimation (FPGA) | ✓ |
| | Decimation (Sensor) | |
| | Binning (FPGA) | - |
| | Binning (Sensor) | |
| Others | Chunks | - |
| | Sequencer | - |
| | Events | - |
| | Firmware update | ✓ |
| | 1st supported firmware version | 2.20 |



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