

37U Series

DFM 37UX290-ML

- IMX290 CMOS STARVIS Sensor
- 2.1 MP
- USB3 Vision / UVC compliant
- Trigger and I/Os
- M12x0.5 mount



The 37U series camera DFM 37UX290-ML with a Sony IMX290 sensor delivers 143 frames per second with a resolution of 1920x1080 (2.1 MP).

The Imaging Source's 37 Series board-level cameras feature a range of Sony and onsemi sensors with resolutions up to 12MP, as well as trigger, I/O, and connector options, providing maximum flexibility for developers and OEMs. The cameras' small footprint and reversible USB-C connector make them well-suited for space-constrained designs for applications in industrial automation, mobile robotics, and medical equipment.

The USB3 Vision standard allows for rapid integration into new and existing applications via The Imaging Source's [IC Imaging Control 4 SDK](#) as well as most other third-party image processing libraries.

Note: This Data Sheet is intended to provide a summary overview for an individual camera model. The Imaging Source's website also offers information on spectral sensitivity, dimensional diagrams, sensor data sheets, STEP files as well as our full product catalog. For comprehensive technical information, please refer to the Technical Reference Manual specific to each camera model.

www.theimagingsource.com



1 Quick Facts

General	
Vision Standard	USB3 Vision (UVC compliant)
Dynamic Range	10 bit
Resolution	1920x1080
Frame Rate at Full Resolution	143

Optical Interface	
IR-Cut filter	No
Sensor Type	Sony IMX290LQR-C
Shutter Type	Rolling
Sensor Format	1/2.8 inch
Pixel Size	2.9 μm
Lens Mount	M12x0.5

Electrical Interface	
Interface	USB 3.1gen1
Supply Voltage	4.75 VDC to 5.25 VDC
Current Consumption	approx 260 mA @ 5 VDC

Mechanical Data	
Dimensions	H: 30 mm, W: 30 mm, L: 15 mm
Mass	7 g

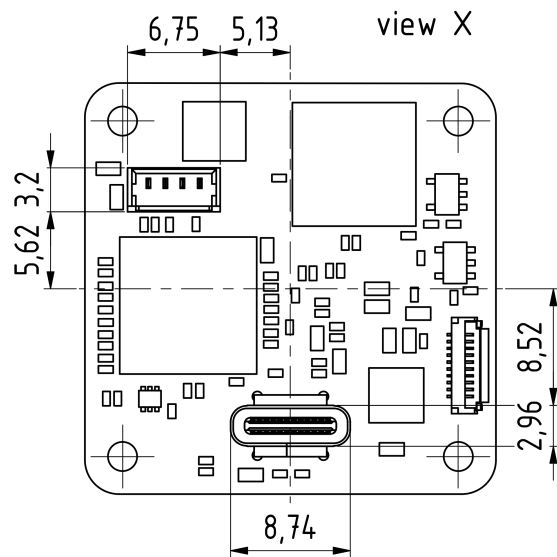
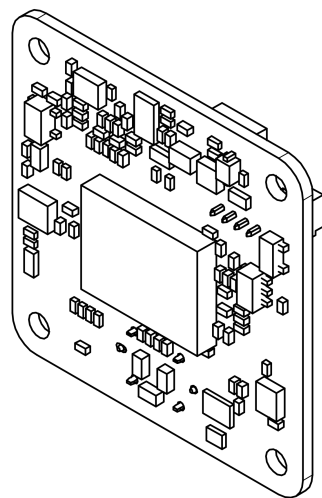
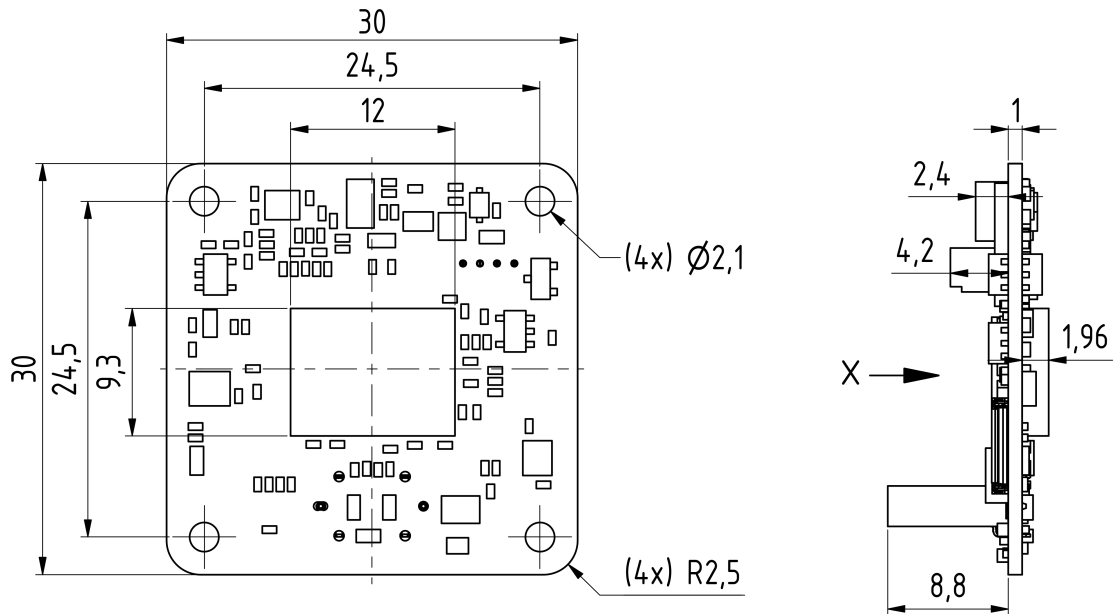
Environmental Conditions	
Temperature (operating)	-5 °C to 45 °C
Temperature (storage)	-20 °C to 60 °C
Humidity (operating)	20 % to 80 % (non-condensing)
Humidity (storage)	20 % to 95 % (non-condensing)



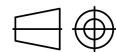
Dimensional Diagrams

2 Dimensional Diagrams

2.1 DFM 37UX290-ML



Scale: 2:1
Dimensions: mm
Tolerances: DIN ISO 2768m





3 Spectral Characteristics

3.1 Spectral Sensitivity - IMX290LQR-C

Sensor: Sony IMX290 - courtesy of Sony Deutschland GmbH

