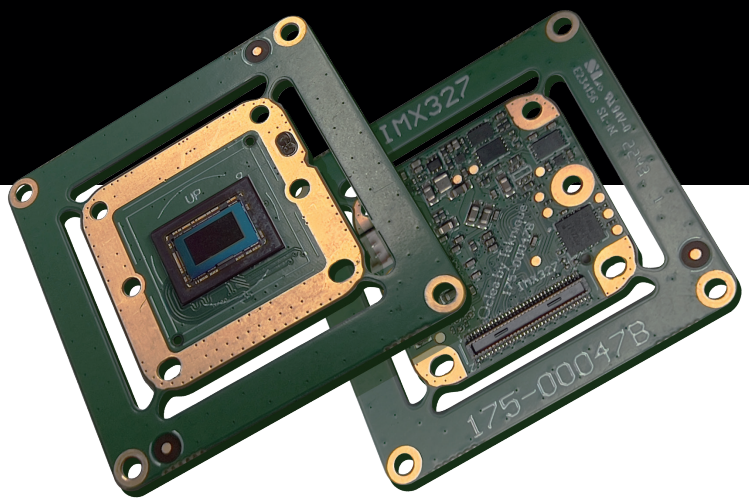
PRODUCT BRIEF

Oclea™ IMX327 Sensor Module

The Oclea™ IMX327 sensor module is engineered for performance and precision in demanding low-light environments.

Built on Sony's STARVIS™ technology, this 2.07-megapixel, 1/2.8" back-illuminated CMOS sensor module delivers exceptional image clarity, making it a top choice for security, industrial inspection, and automotive vision systems.

Its advanced pixel architecture ensures superior sensitivity and low noise, even in near-dark conditions, providing the reliability needed for mission-critical applications.



The Oclea™ IMX327 sensor module
Size 38 x 38 x 6.54 mm • **Weight** 5g *

* Can be depanneled down to **Size** 25 x 25 x 6.54 mm • **Weight** 3g

KEY FEATURES

2.07 MP resolution, 1/2.8" optical format

Offers full HD (1920 x 1080) resolution in a compact 1/2.8" sensor size, ideal for applications requiring a balance of performance and integration flexibility.

STARVIS™ technology for excellent low-light performance

Sony's STARVIS™ back-illuminated pixel technology enhances sensitivity in low-light conditions, supporting visibility down to sub-lux levels for security and night-time operation.

High sensitivity and low noise

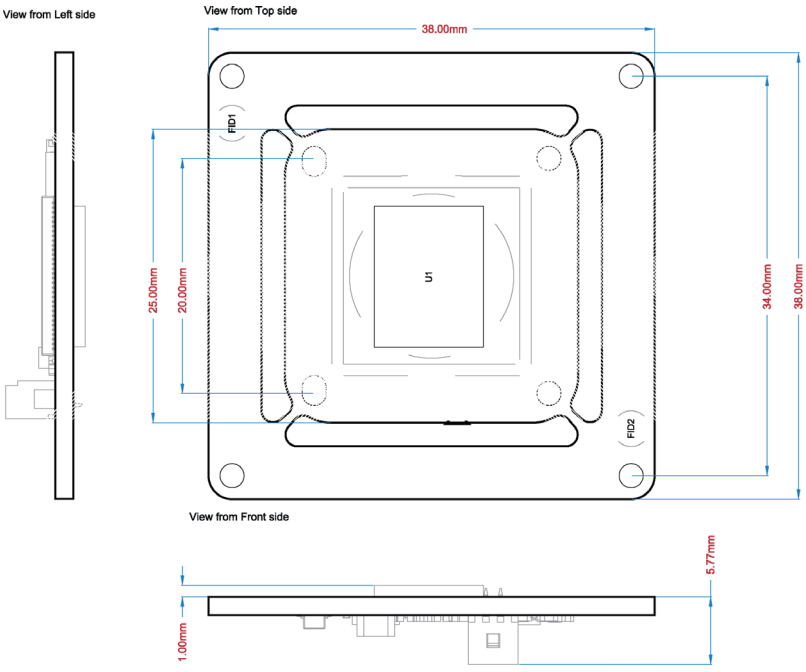
Maintains clarity and accuracy in both brightly lit and dim conditions, improving image quality for analytics and classification algorithms. for enhanced clarity Delivers strong signal-to-noise ratio, capturing clear and consistent images even in dim or high-contrast environments.

High dynamic range (HDR) for balanced exposure in varying light conditions

Enables detailed capture in scenes with both dark and bright regions, avoiding washed-out highlights or shadowed detail loss.

Compact design for integration into space-constrained systems

The 38x38mm (downsizable to 25x25mm) board layout simplifies integration into embedded devices or enclosures with minimal mechanical overhead.



GENERAL SPECIFICATIONS

MODULE SPECIFICS

Resolution: 1920 x 1080 (2.07 MP)

- Image Sensor Type: Sony STARVIS™ CMOS sensor
- Target Applications: Surveillance, automotive ADAS, machine vision

Optical Format: 1/2.8”

Pixel Size: 2.9µm x 2.9µm

Frame Rate: Up to 60 fps

Interface: MIPI CSI-2 (4 lanes)

INPUT/OUTPUT INTERFACES

MIPI CSI-2 data interface

- Simple plug-and-play integration with standard MIPI hosts
- Auxiliary I/O for external triggering and synchronisation
- GPIO, PWM, and UART support for advanced integration
- GPIO and I2C support for sensor control and peripheral interface

I2C control interface

Flexible power input options

POWER CONSUMPTION

Typical power consumption: < 0.5W (module dependent)

- Low thermal profile enables passive thermal solutions

COMPANION LENS OPTIONS

3.6mm M12 lens, F2.0, 87° HFOV

- Optimised for full-HD capture with low distortion

6.0mm M12 lens, F1.8, 58° HFOV

IR-cut filter or dual-bandpass options available for day/night operation

The Oclea™ IMX327 sensor module