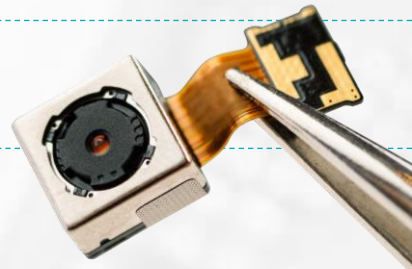
INV-IMX728-8MP

8.3MP (4K) RGB Rolling Shutter Camera Module

The INV-IMX728-8.3MP camera module is based on the Sony IMX728 back-illuminated stacked CMOS image sensor, optimized for automotive and advanced industrial sensing applications.
Designed for the rigors of automotive safety, the IMX728 delivers a high dynamic range of 120 dB through its advanced pixel architecture, effectively capturing details in both highlights and deep shadows. By utilizing Sony's stacked BSI structure, it achieves high sensitivity and low noise, which is critical for object recognition and sensing in low-light environments. The sensor operates with an Electronic Rolling Shutter and supports high-speed performance at up to 45 fps at full resolution via a MIPI CSI-2 interface. Its robustness and high pixel density make it an ideal choice for ADAS front-sensing cameras and high-performance robotic vision.

- High-speed capture with low noise using backside illumination for automotive-grade reliability.
- Full characterization of shading, distortion, and intrinsic/extrinsic parameters.
- Optimized BLC, LSC, and CCM tailored for ADAS and high-performance machine vision.
- High-precision Auto Exposure, Auto White Balance, and rapid focus response.
- Wide dynamic range support to handle complex lighting and sudden glare transitions.
- Advanced pixel design to eliminate flickering from traffic signs and vehicle lighting.
- Specialized IQ tuning for object detection, lane keeping, and autonomous driving analytics.



Resolution	Sensor Vendor	Image Sensor	Interface	Focus	Optical Size	EFL	FOV (degrees)	Focus Range	Optical Distortion	Module Size (mm)	Application
8MP	Sony	IMX728	MIPI	FF	1/1.72"	Multiple Options		Dependent on the lens		30x30x25mm	Security, Automotive