

INV-AR0246FF-2MP

2MP RGB/Mono Rolling Shutter Camera Module, MIPI-CSI Interface for SMARC QCS6490 Vision AI Dev Kit

The INV-AR0246-2MP camera module is based on the OnSemi AR0246 color CMOS 2-megapixel image sensor with M12 mount lens. The AR0246 belongs to onsemi's Hyperlux LH product family, it's a 1/4-inch Back-Side Illuminated (BSI) Stacked CMOS digital image sensor with a 1920 x 1080 active-pixel array. This advanced sensor captures images in either linear, enhanced Dynamic Range (eDR) or embedded High Dynamic Range (eHDR with 120dB) modes, with a rolling-shutter readout.

The AR0246 has Adaptive Local Tuning Mapping (ALTM) inside to support low cost ISP with excellent image quantity. It is supported by a 2.0 μm BSI pixel from onsemi and delivers excellent performance in lowlight & NIR wavelengths. The sensor includes advanced functions such as Wake On Motion (WOM), Line Interleaved HDR (LI-HDR), eDR and eHDR. With eHDR+ALTM, it makes AR0246 highly suitable for a variety of applications including facial recognition, carDVR and security camera and Wearables.



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Stacked BSI architecture designed for high-performance low-light and NIR imaging.



Captures up to 120 dB with on-sensor eHDR and ALTM processing.



Precise characterization of shading, distortion, and intrinsic/extrinsic parameters.



Supports ERS and Global Reset Release (GRR) for versatile motion capture.



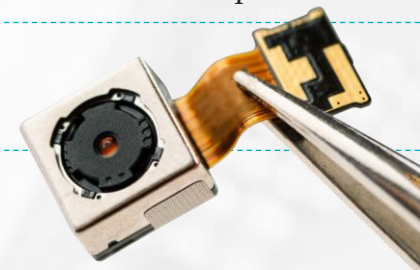
Optimized Auto Exposure, White Balance, WOM.



Optimized for facial recognition and vision systems.



Super Low Power (SLP) mode for extended operation in battery-powered devices.



Resolution	Sensor Vendor	Image Sensor	Interface	Focus	Optical Size	EFL	FOV (degrees)	Focus Range	Optical Distortion	Module Size (mm)	Application
2MP	OnSemi	AR0246	MIPI	FF	1/4"	3.6	73	70cm~∞	<-6%	22x21mm	Security & Surveillance