

AR0822

Image Sensor, 8 MP, Rolling Shutter, Hyperlux™ LH

Product Overview

For complete documentation, see the data sheet.

The AR0822 belongs to onsemi's Hyperlux LH product family, it is a 8-megapixel (MP) stacked 1/1.8inch (8.81mm diagonal) BSI (back-side illuminated) CMOS digital image sensor based upon a 2.0 μm pixel. It features an activepixel array of 3840 (H) x 2160 (V) and is capable of 4K video at 60 frames-per-second (fps), capturing images in either linear or eHDR modes (120 dB) with a rollingshutter readout.

Features

- 4K (8 MP) at 60 fps for Excellent Video Performance
- Fast, Full-Resolution Video Capture of 3840 X 2160 at 30 fps in 3- Exposure embedded High Dynamic Range (eHDR) up to 120 dB
- Advanced On-Sensor eHDR Reconstruct with Flexible Exposure Ratio Control
- Two Exposure Line Li-HDR Output
- Wake-on-Motion Feature
- Extended Dynamic Range (eDR)
- Intelligent Lineralization to Minimize Motion Artifacts and LED Flickers

Applications

- 4K/ 8 MP Imaging

End Products

- Security and Surveillance Cameras
- Robotics
- Vehicle Dashboard Cameras

Part Electrical Specifications

Product	Status	Compliance	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (μm)	Output Interface	Color	Family	Packaging Type	CASE Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
AR0822NPSC10 SMTA0-DP	Active		CMOS	8	90	1/1.8 inch	Electronic Rolling Shutter and Global Reset Release	2.0 x 2.0	MIPI	RGB	Hyperlux LH	PBG A75 14.0 0x9.50x1.55, 1.00 P	117 CU. PDF	4	260	JTRAY	1470
AR0822NPSC10 SMTA0-DR	Active		CMOS	8	90	1/1.8 inch	Electronic Rolling Shutter and Global Reset Release	2.0 x 2.0	MIPI	RGB	Hyperlux LH	PBG A75 14.0 0x9.50x1.55, 1.00 P	117 CU. PDF	4	260	JTRAY	1470
AR0822NPSM10 SMTA0-DP	Active		CMOS	8	90	1/1.8 inch	Electronic Rolling Shutter and Global Reset Release	2.0 x 2.0	MIPI	Monochrome	Hyperlux LH	PBG A75 14.0 0x9.50x1.55, 1.00 P	117 CU. PDF	4	260	JTRAY	1470
AR0822NPSM10 SMTA0-DR	Active		CMOS	8	90	1/1.8 inch	Electronic Rolling Shutter and Global Reset Release	2.0 x 2.0	MIPI	Monochrome	Hyperlux LH	PBG A75 14.0 0x9.50x1.55, 1.00 P	117 CU. PDF	4	260	JTRAY	1470