

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 | Package Type | Case Outline | MSL Type | MSL Temp (°C) | Container Type | Container Qty. |
|-----------------------|--------|---|------|------------|------------------|----------------|---|-----------------|------------------|-------|-------------|---------------------------------|--------------|----------|---------------|----------------|----------------|
| AR0822NPSC10 SMTA0-DP | Active |  | CMOS | 8 | 90 | 1/8 inch | Electronic Rolling 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 | 1/8 inch | Electronic Rolling 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 | 1/8 inch | Electronic Rolling 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-DR | Active |  | CMOS | 8 | 90 | 1/8 inch | Electronic Rolling 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 |