

# **Product Overview**

# AR0239: CMOS Image Sensor, 2.3 MP, 1/2.7"

#### For complete documentation, see the data sheet.

The AR0239 from ON Semiconductor is a 1/2.7-inch CMOS digital image sensor with an active-pixel array of 1936 (H) × 1188 (V). It captures images in either linear or high dynamic range modes, with rolling-shutter readout. It includes sophisticated camera functions such as in-pixel binning, windowing and both video and single frame modes. It is designed for both low light and high dynamic range scene performance. It is programmable through a simple two-wire serial interface. The AR0239 produces extraordinarily clear, sharp digital pictures, and its ability to capture both continuous video and single frames makes it the perfect choice for a wide range of applications, including surveillance and HD video.

#### **Features**

- 2.3Mp at 90 fps for Excellent Video Performance
- Small Optical Format (1/2.7-inch)
- 1080p Mode for 16:9 Video
- Superior Low-light Performance
- 3.0um large Back Side Illuminated Pixel Technology
- Supports Line Interleaved T1/T2/T3 Readout to Enable HDR Processing in ISP Chip at 1080P and 30fps
- On-chip Phase-locked Loop (PLL) Oscillator
- Integrated Color and Lens Shading Correction
- Slave Mode for Precise Frame-rate Control
- Data Interfaces: HiSPi (SLVS) 4 Lanes MIPI CSI-2 4 Lanes Parallel For more features, see the data sheet

## **Applications**

- Video Surveillance
- · High Dynamic Range Imaging

## **End Products**

- Security Camera
- Action camera
- Car DVR
- · Body camera

| Part Electrical Specifications |                   |                        |        |      |                |                        |                   |                 |                       |                     |                |                 |
|--------------------------------|-------------------|------------------------|--------|------|----------------|------------------------|-------------------|-----------------|-----------------------|---------------------|----------------|-----------------|
| Product                        | Pricing (\$/Unit) | Compliance             | Status | Туре | Megapix<br>els | Frame<br>Rate<br>(fps) | Optical<br>Format | Shutter<br>Type | Pixel<br>Size<br>(µm) | Output<br>Interface | Color          | Package<br>Type |
| AR0239SRSC00SUEA0<br>-DP       |                   | Pb-free<br>Halide free | Active | CMOS | 2.3            | 90                     | 1/2.7<br>inch     | Rolling         | 3.0 x 3.0             | Multi               | Bayer<br>Color | IBGA-63         |
| AR0239SRSC00SUEA0<br>-DPBR     |                   | Pb-free<br>Halide free | Active | CMOS | 2.3            | 90                     | 1/2.7<br>inch     | Rolling         | 3.0 x 3.0             | Multi               | Bayer<br>Color | IBGA-63         |
| AR0239SRSC00SUEA0<br>-DR       |                   | Pb-free<br>Halide free | Active | CMOS | 2.3            | 90                     | 1/2.7<br>inch     | Rolling         | 3.0 x 3.0             | Multi               | Bayer<br>Color | IBGA-63         |
| AR0239SRSC00SUEA0<br>-DRBR     |                   | Pb-free<br>Halide free | Active | CMOS | 2.3            | 90                     | 1/2.7<br>inch     | Rolling         | 3.0 x 3.0             | Multi               | Bayer<br>Color | IBGA-63         |

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