

## Product Overview

### AR0237AT: CMOS Image Sensor, Digital, 2.1 MP/Full HD, 1/2.7-inch

For complete documentation, see the data sheet.

The AR0237AT from ON Semiconductor is a 1/2.7-inch CMOS digital image sensor with an active-pixel array of 1928 (H) × 1088 (V). It captures images in either linear or high dynamic range modes, with a 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 AR0237AT 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

- Superior Low-light Performance
- Latest 3.0 μm pixel with ON Semiconductor DR-Pix Technology with Dual Conversion Gain
- Full HD Support at Up to 1080p 60 fps for Superior Video Performance
- Linear or High Dynamic Range Capture
- Supports Line Interleaved T1/T2 Readout to Enable HDR Processing in ISP Chip
- Support for External Mechanical Shutter
- On-chip Phase-locked Loop (PLL) Oscillator
- Integrated Position-based Color and Lens Shading Correction
- Slave Mode for Precise Frame-rate Control
- Stereo/3D Camera Support

For more features, see the data sheet

### Applications

- Automotive Surround View
- Automotive Scene Viewing, Including DVR
- High Dynamic Range Imaging

### End Products

- Automotive

### Part Electrical Specifications

| Product                  | Compliance  | Status | Type | Megapixels | Frame Rate (fps) | Optical Format | Shutter Type                                | Pixel Size (μm) | Output Interface   | Color | Package Type |
|--------------------------|---|--------|------|------------|------------------|----------------|---|-----------------|--------------------|-------|--------------|
| AR0237ATSC12XUEA0-DPBR   | AEC Qualified<br>PPAP Capable<br>Pb-free<br>Halide free | Active |      |            |                  |                |   |                 |                    |       | IBGA-80      |
| AR0237ATSC12XUEA0-DPBR-E | Pb-free<br>Halide free                                  | Active | CMOS | 2.1        | 60 fps           | 1/2.7 inch     | Electronic Rolling and Global Reset Release | -               | HiSPi™<br>Parallel | RGB   | IBGA-80      |
| AR0237ATSC12XUEA0-DRBR   | AEC Qualified<br>PPAP Capable<br>Pb-free<br>Halide free | Active |      |            |                  |                |   |                 |                    |       | IBGA-80      |
| AR0237ATSC12XUEA0-DRBR-E | Pb-free<br>Halide free                                  | Active | CMOS | 2.1        | 60 fps           | 1/2.7 inch     | Electronic Rolling and Global Reset Release | -               | Parallel<br>HiSPi™ | RGB   | IBGA-80      |

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 12/6/2018