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 m 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 / PPAP Capable / Pb-free / Halide free	Active									IBGA-80
AR0237ATSC12XUEA0-DPBR-E	Pb-free / Halide free	Active	CMOS	2.1	60 fps	1/2.7 inch	Electronic Rolling and Global Reset Release	-	HiSPi™ / Parallel	RGB	IBGA-80
AR0237ATSC12XUEA0-DRBR	AEC Qualified / PPAP Capable / Pb-free / Halide free	Active									IBGA-80
AR0237ATSC12XUEA0-DRBR-E	Pb-free / Halide free	Active	CMOS	2.1	60 fps	1/2.7 inch	Electronic Rolling and Global Reset Release	-	Parallel / HiSPi™	RGB	IBGA-80

For more information please contact your local sales support at www.onsemi.com.

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