

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **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	Туре	Megapixel s	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0237ATSC12XUEA 0-DPBR	AEC Qualified PPAP Capable Pb-free Halide free	NEW									IBGA-80
AR0237ATSC12XUEA 0-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
AR0237ATSC12XUEA 0-DRBR	AEC Qualified PPAP Capable Pb-free Halide free	NEW									IBGA-80
AR0237ATSC12XUEA 0-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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