

Product Overview

AR0238: CMOS Image Sensor, Digital, 2.1 MP/Full HD, 1/2.7-Inch

For complete documentation, see the data sheet.

ON Semiconductor's AR0238 is a 1/2.7-inch CMOS digital image sensor with an active-pixel array of 1928Hx1088V. 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 AR0238 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

- Latest 3.0µm pixel with ON Semiconductor DR-Pix™ technology with Dual Conversion Gain
- Supports line interleaved T1/T2 readout
- Full HD support
- HiSpi or Parallel Interface

Applications

- Video recording and streaming
- 1080p60 (monitoring) video applications
- High dynamic range imaging

Benefits

- Superior low-light performance
- Enables HDR processing in ISP chip
- 1080P 60 fps for superior video performance
- Flexible implementation for OEM Designs

End Products

- Car DVR
- Wireless Cameras
- Web Cameras

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0238C5SC12SHRA0-DP		Pb-free Halide free	Active	CMOS	2.1	60	1/2.7 inch	Rolling	3.0 x 3.0	HiSpi™	RGB	PLCC-48
AR0238C5SC12SHRA0-DP1		Pb-free Halide free	Active									PLCC-48
AR0238C5SC12SHRA0-DP2		Pb-free Halide free	Active									PLCC-48
AR0238C5SC12SHRA0-DR		Pb-free Halide free	Active	CMOS	2.1	60	1/2.7 inch	Rolling	3.0 x 3.0	HiSpi™	RGB	PLCC-48
AR0238C5SC12SPRA0-DR		Pb-free Halide free	Active	CMOS	2.1	60	1/2.7 inch	Rolling	3.0 x 3.0	Parallel	RGB	PLCC-48
AR0238C5SC12SPRA0-DR1		Pb-free Halide free	Active									PLCC-48
AR0238C5SC12SUD20		Pb-free Halide free	Active									
AR0238IRSH12SUD20		Pb-free Halide free	Active	CMOS	2.1	60	1/2.7 inch	Electronic Rolling and Global Reset Release	3.0 x 3.0	Multi	RGB-IR	

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

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