

## Product Overview

### AR0221: CMOS Image Sensor, 2.1 MP, 1/1.7"

For complete documentation, see the data sheet.

ON Semiconductor AR0221 is a 1/1.7-inch CMOS digital image sensor with an active-pixel array of 1928 (H) × 1088 (V). This advanced image sensor captures images in either linear or high dynamic range, with rolling-shutter readout. It includes sophisticated camera functions such as in-pixel binning, windowing and both video and single frame modes. AR0221 is optimized for both low light and high dynamic range scene performance with 4.2µm BSI pixels. The sensor includes flexible functions such as in-pixel binning, windowing, and both video and single frame modes. The device is programmable through a simple two-wire serial interface, and supports both MIPI and HiSPi output interfaces.

### Features

- 2.1Mp at 60 fps for Excellent Video Performance
- Optical Format (1/1.7-inch)
- 1080p Mode for 16:9 Video
- Superior Low-light Performance
- 4.2µm 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: - 4-lane MIPI CSI-2 and HiSpi SLCS

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	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0221SR2C00SUEA0-DPBR		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	2.1	60	1/2 inch	Electronic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	IBGA-87
AR0221SR2C00SUEA0-DPBR1		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	2.1	60	1/2 inch	Electronic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	IBGA-87
AR0221SR2C00SUEA0-DRBR		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	2.1	60	1/2 inch	Electronic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	IBGA-87

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

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