

## AR0521

# CMOS Image Sensor, 5.1 MP, 1/2.5"

## Product Overview

For complete documentation, see the data sheet.

The AR0521 is a 1/2.5inch CMOS digital image sensor with an activepixel array of 2592 (H) x 1944 (V). It captures images in either linear or high dynamic range modes with a rollingshutter readout, and includes sophisticated camera functions such as binning, windowing and both video and single frame modes. It is designed for both low light and high dynamic range performance, with line interleaved T1/T2 read out to support off chip HDR in an ISP chip. The AR0521 produces extraordinarily clear, sharp digital pictures, and its ability to capture both continuous video and single frames makes it the perfect choice for a security applications.

## Features

- 5 Mp at 60 fps for Excellent Video Performance
- Small Optical Format (1/2.5inch)
- 1440p Mode for 16:9 Video
- Superior Lowlight Performance
- 2.2  $\mu$ m Back Side Illuminated (BSI) Pixel Technology
- Supports Line Interleaved T1/T2 Readout to Enable HDR Processing in ISP Chip
- Support for External Mechanical Shutter
- Onchip Phaselocked Loop (PLL) Oscillator
- Integrated Color and Lens Shading Correction
- Slave Mode for Precise Framerate Control

For more features, see the data sheet







## Applications

- Video Surveillance
- High Dynamic Range Imaging

## End Products

- Security Camera
- Action camera
- Car DVR

## Part Electrical Specifications

Product	Status	Compliance	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (μm)	Output Interface	Color	Family	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
AR0521SR2C09 SURAO-DP	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	-	PLCC-52	776 AW. PDF	4	260	JTRAY	1680
AR0521SR2C09 SURAO-DP1	Last Shipments		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	-	PLCC-52	776 AW. PDF	4	260	JTRAY	168
AR0521SR2C09 SURAO-DR	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	-	PLCC-52	776 AW. PDF	4	260	JTRAY	1680
AR0521SR2C09 SURAO-DR1	Obsolete		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	-	PLCC-52	776 AW. PDF	4	260	JTRAY	168
AR0521SR2M09 SURAO-DP	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	Mono	-	PLCC-52	776 AW. PDF	4	260	JTRAY	1680
AR0521SR2M09 SURAO-DR	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	Mono	-	PLCC-52	776 AW. PDF	4	260	JTRAY	1680