# 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 µm 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



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## Part Electrical Specifications

| Product | Status | Compilance | 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. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AR0521SR2C09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 1680 |
| AR0521SR2C09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 168 |
| AR0521SR2C09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 1680 |
| AR0521SR2C09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 168 |
| AR0521SR2M09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 1680 |
| AR0521SR2M09SURA0-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 | 776AW.PDF | 4 | 260 | JTRAY | 1680 |


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