

AR0522

CMOS Image Sensor, 5.1 MP, 1/2.5", Near Infra-Red Enhancement

Product Overview

For complete documentation, see the data sheet.

The AR0522 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 AR0522 produces extraordinarily clear, sharp digital pictures, and its ability to capture both continuous video and single frames makes it the perfect choice for wide range of applications.

Features

- 5 Mp at 60 fps for Excellent Video Performance
- Small Optical Format (1/2.5inch)
- Color Filter Array : RGB and Monochrome
- 1440p Mode for 16:9 Video
- Superior Lowlight Performance
- 2.2 μ m Back Side Illuminated 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

For more features, see the data sheet







Applications

- Video Surveillance
- High Dynamic Range Imaging
- Machine Vision

End Products

- Security camera
- Action camera
- Hunting camera
- Body camera
- Car DVR

Part Electrical Specifications

Product	Status	Compliance	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
AR0522SRSC09 SURAO-DP	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	PLC C-52	776 AW. PDF	4	260	JTRAY	1680
AR0522SRSC09 SURAO-DP1	Obsolete		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	PLC C-52	776 AW. PDF	4	260	JTRAY	168
AR0522SRSC09 SURAO-DR	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	PLC C-52	776 AW. PDF	4	260	JTRAY	1680
AR0522SRSC09 SURAO-DR1	Obsolete		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	RGB	PLC C-52	776 AW. PDF	4	260	JTRAY	168
AR0522SRSM09 SURAO-DP	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	Mono	PLC C-52	776 AW. PDF	4	260	JTRAY	1680
AR0522SRSM09 SURAO-DR	Active		CMOS	5.1	60	1/2.5 inch	Electronic Rolling and Global Reset Release	2.2 x 2.2	Multi	Mono	PLC C-52	776 AW. PDF	4	260	JTRAY	1680

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[onsemi:](#)

[AR0522SRSC09SURA0-DP2](#) [AR0522SRSM09SURA0-DP2](#)