

AR0221

CMOS Image Sensor, 2.1 MP, 1/1.7"

Product Overview

For complete documentation, see the data sheet.

onsemi 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 (1/1.7inch)
- 1080p Mode for 16:9 Video
- Superior Lowlight 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
- Onchip Phaselocked Loop (PLL) Oscillator
- Integrated Color and Lens Shading Correction
- Slave Mode for Precise Framerate 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	Status	Compliance	Type	Me- gapi- xels	Frame Rate (fps)	Opti- cal Format	Shut- ter Type	Pixe- l Size (μm)	Out- put Inter- face	Col- or	Fam- ily	Pac- kage Type	Cas- e Out- line	MS L Type	MS L Temp ($^{\circ}\text{C}$)	Con- tain- er Type	Con- tain- er Qty.
AR0221SR2C00 SUEA0-DPBR	Lifetime		CMOS	2.1	60	1/2 inch	Electron ic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	-	IBGA- 87	503 BR. PDF	4	260	JTRAY	2160
AR0221SR2C00 SUEA0-DPBR1	Obsolete		CMOS	2.1	60	1/2 inch	Electron ic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	-	IBGA- 87	503 BR. PDF	4	260	JTRAY	216
AR0221SR2C00 SUEA0-DRBR	Lifetime		CMOS	2.1	60	1/2 inch	Electron ic Rolling and Global Reset Release	4.2 x 4.2	Multi	RGB	-	IBGA- 87	503 BR. PDF	4	260	JTRAY	2160