

AR0821CS

8.3 Mp Rolling Shutter CMOS Digital Image Sensor

Product Overview

For complete documentation, see the data sheet.

AR0821CS is a 1/1.7inch CMOS digital image sensor with a 3848 H x 2168 V activepixel array. This advanced sensor captures images in either linear or high dynamic range, with rollingshutter readout. AR0821 is optimized to deliver highquality performance in both lowlight and challenging lighting conditions. It is supported by a 2.1 m DRPix™ BSI pixel from **onsemi** and embedded HDR (eHDR) technology that delivers greater than 140 dB. The sensor includes advanced functions such as inpixel binning, windowing, summing, and both video and single frame modes to provide flexible Region of Interest (ROI), optimal bandwidth as needed by the application and low power consumption. These characteristics make the sensor very suitable for a variety of applications including scanning, dashcams, autonomous mobility, and inspection & quality control.

Features

- Industry Leading Embedded High Dynamic Range (eHDR)
- BSI Pixel with High Linear Full Well
- Low Operational Power
- Built-In Statistics Engine
- Multiple Functional Modes - Binning, Scaling, Summing, Windowing, Context Switching, Trigger

Applications

- Aerial Imaging
- Machine Vision
- Smart Homes/Security
- Scanning
- Commercial Surveillance

End Products

- Autonomous Guided Vehicles (Drones)
- Machine Vision Cameras
- ID, MRZ Scanners
- Retail Analytics Cameras
- Video Doorbells

Part Electrical Specifications

Product	Status	Compliance	Type	Me gapi xels	Fra me Rate (fps)	Opti cal For mat	Shu tter Type	Pixe l Size (µm)	Out put Inte rfac e	Col or	Fam ily	Pac kag e Type	Cas e Outl ine	MS L Type	MS L Tem (°C)	Con tain er Type	Con tain er Qty.
AR0821CSSC18 SMEA0-DPBR	Active		CM OS	8.3	60	1/1. 7 inch	Elec tron ic Roll ing	2.1 x 2.1	MIPI	RGB	-	IBG A- 95	503 BW. PDF	4	260	JTR AY	270 0
AR0821CSSC18 SMEA0-DPBR1	Last Shipme nts		CM OS	8.3	60	1/1. 7 inch	Elec tron ic Roll ing	2.1 x 2.1	MIPI	RGB	-	IBG A- 95	503 BW. PDF	4	260	JTR AY	270
AR0821CSSC18 SMEA0-DRBR	Active		CM OS	8.3	60	1/1. 7 inch	Elec tron ic Roll ing	2.1 x 2.1	MIPI	RGB	-	IBG A- 95	503 BW. PDF	4	260	JTR AY	270 0
AR0821CSSC18 SMEA0-DRBR1	Obsole te		CM OS	8.3	60	1/1. 7 inch	Elec tron ic Roll ing	2.1 x 2.1	MIPI	RGB	-	IBG A- 95	503 BW. PDF	4	260	JTR AY	270