Product Overview

AR0431: CMOS Image Sensor, 4 MP, 1/3.2", Near Infra-Red Enhancement

For complete documentation, see the data sheet.

The ON Semiconductor AR0431 is a stacked 1/3.2-inch BSI CMOS active -pixel digital image sensor with a pixel array of 2312H x 1746V. The AR0431 has been designed for IoT and security cameras. AR0431 can provide high quality imaging for both day and night lighting conditions perfect for security cameras. It has the ability to record at 120 fps delivering slow motion capable video which can use zoom and retain the resolution quality which is perfect for wearable devices.

Features

- 4 MP at 120 frames per second
- High linear full well
- Low power operation and special monitoring mode
- 1/3-inch optical format
- Sensor Synchronization
- Latest stacked pixel technology
- Near Infra-red enhancement

Benefits

- Slow Motion video capability
- Great natural dynamic range for challenging lighting conditions
- Power savings, heat savings while fully active or while always on.
- Standard compact sensor size to fit into many IoT type applications
- Allows for multiple camera synchronization for 360 degree cameras or longer range depth solutions
- Compact sensor size and leading color performance
- Save power and cost for using less NIR LEDs

Applications

- 4 MP CMOS Imaging sensor for consumer and industrial end products.

End Products

- IoT Camera
- Wearable Camera
- Security Camera
- AR/VR/MR Camera

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0431CSSC14SMRA0-DP	Pb-free Halide free	NEW	CMOS	4	120	1/3.2 inch	Rolling	2.0 x 2.0	MIPI	RGB	mPLCC-48
AR0431CSSC14SMRA0-DP1	Pb-free Halide free	NEW	CMOS	4	120	1/3.2 inch	Rolling	2.0 x 2.0	MIPI	RGB	mPLCC-48
AR0431CSSC14SMRA0-DR	Pb-free Halide free	NEW	CMOS	4	120	1/3.2 inch	Rolling	2.0 x 2.0	MIPI	RGB	mPLCC-48
AR0431CSSC14SMRA0-DR1	Pb-free Halide free	NEW	CMOS	4	120	1/3.2 inch	Rolling	2.0 x 2.0	MIPI	RGB	mPLCC-48

For more information please contact your local sales support at www.onsemi.com.

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