Product Overview

AR0231AT: CMOS Image Sensor, 2.3 MP, 1/2.7"

For complete documentation, see the data sheet.

The AR0231AT is a 1/2.7-inch CMOS digital image sensor with an active-pixel array of 1928Hx1208V. It includes LED Flicker Mitigation (LFM) that eliminates high frequency LED flicker from traffic signs and vehicle LED lighting and allows Traffic Sign Reading algorithms to operate in all light conditions. The AR0231AT uses the latest 3.0 micron Back Side Illuminated (BSI) pixel with ON Semiconductor's DR-Pix™ technology, which offers dual conversion gain for improved performance under all lighting conditions. It captures images in linear, HDR or LFM modes, and offers frame-to-frame context switching between modes. The AR0231AT also includes features that support ASIL B.

Features

- High Dynamic Range
- LED Flicker Mitigation (LFM)
- ASIL B Support
- Up to 4-exposure HDR at 1928 × 1208 and 30 fps or 3-exposure HDR at 1928 × 1208 and 40 fps
- Latest 3.0 m Back Side Illuminated (BSI) Pixel with ON Semiconductor DR-Pix Technology
- Data Interfaces: up to 4-lane MIPI CSI-2, Parallel, or up to 4-lane High Speed Pixel Interface (HiSPi) Serial Interface (SLVS and HiVCM)
- Advanced HDR with Flexible Exposure Ratio Control
- Selectable Automatic or User Controlled Black Level Control
- Frame to Frame Switching among up to 4 Contexts to Enable Multi-function Systems
- Spread-spectrum Input Clock Support
  For more features, see the data sheet

Applications

- 1080p30 Video Applications
- Mirror Replacement
- High Dynamic Range Imaging
- ADAS + Viewing Fusion
- Automotive ADAS

End Products

- ADAS
- Automotive

Part Electrical Specifications

Product	Pricing ($/Unit)	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0231AT7B00XUD20		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									
AR0231AT7B00XUEA0-DPBR		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									IBGA-121
AR0231AT7B00XUEA0-DRBR		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									IBGA-121
AR0231AT7C00XUD20		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									
AR0231AT7C00XUEA0-DPBR		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									IBGA-121
AR0231AT7C00XUEA0-DRBR		AEC Qualified, PPAP Capable, Pb-free, Halide free	Active									IBGA-121
AR0231ATSC00XUEA0-DRBR-E		Pb-free, Halide free	Active	CMOS	2.3	40 / 40 fps	1/2.7 inch	Rolling, Electronic Rolling	3.0 x 3.0	MIPI, Parallel, HiSPi™	Other RGB	IBGA-121

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

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