

## Product Overview

### AR0135AT: 1/3" 1.2 MP Global Shutter CMOS Image Sensor

For complete documentation, see the data sheet.

This 1/3-inch format, 1.2 MP imaging device has been designed to address the challenging requirements of automotive in-cabin cameras. The new global shutter sensor allows the camera to “freeze” fast moving scene data, and ensures effective synchronization with pulsed light sources. The AR0135 sensor incorporates a new innovative global shutter pixel design, with 10X lower dark current and 4X higher shutter efficiency vs. previous generation products. These improvements allow the sensor to produce clear, low-noise images, in both low-light and bright scenes, and in high temperature environments. This performance enables the required eye tracking and gesture detection functionality in next generation automotive in-cabin systems.

### Features

- ON Semiconductor's Next Generation Global Shutter Technology
- Superior Low-light Performance
- HD Video (720p60)
- Video/Single Frame Mode
- Flexible Row-skip Modes
- On-chip AE and Statistics Engine
- Parallel and Serial Output
- Support for External LED or Flash
- Auto Black Level Calibration
- Context Switching

For more features, see the data sheet

### Applications

- Automotive In-Cabin / Driver Monitoring System
- 720p60 Video Applications

## Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
AR0135AT2M00XUD20	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	Parallel HiSPi™	Mono	
AR0135AT2M00XUEA0-DRBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	HiSPi™ Parallel	Mono	IBGA-63
AR0135AT2M00XUEA0-TPBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	Parallel HiSPi™	Mono	IBGA-63
AR0135AT2M00XUEA0-TRBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	HiSPi™ Parallel	Mono	IBGA-63
AR0135AT2M25XUEA0-DPBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	HiSPi™ Parallel	Mono	IBGA-63
AR0135AT2M25XUEA0-DRBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	Parallel HiSPi™	Mono	IBGA-63
AR0135AT2M25XUEA0-TPBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	Parallel HiSPi™	Mono	IBGA-63
AR0135AT2M25XUEA0-TRBR	AEC Qualified PPAP Capable Pb-free Halide free	Active	CMOS	1.2	54	1/3 inch	Global Shutter	3.75 x 3.75	Parallel HiSPi™	Mono	IBGA-63

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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