

Product Overview

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

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 AR0135AT 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

End Products

- Driver Monitoring System

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 |
|------------------------|-------------------|---|--------|------|------------|------------------|----------------|----------------|-----------------|------------------|-------|--------------|
| AR0135AT2M00XUD20 | | 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 | |
| AR0135AT2M00XUEA0-DPBR | | AEC Qualified PPAP Capable Pb-free Halide free | Active | | | | | | | | | IBGA-63 |
| 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 | HiSPi™ Parallel | 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 |
| AR0135AT2M25XUD20 | | AEC Qualified PPAP Capable Pb-free Halide free | Active | | | | | | | | | |
| 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 | HiSPi™ Parallel | Mono | IBGA-63 |
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For more information please contact your local sales support at www.onsemi.com.

Created on: 7/10/2021