

# **Product Overview**

# AR0234AT: 1/2.6-inch 2.3 Mp CMOS Digital Image Sensor with Global Shutter

#### For complete documentation, see the data sheet.

The AR0234AT is a 1/2.6-inch 2Mp CMOS digital image sensor with an active-pixel array of 1920 (H) x 1200 (V). It incorporates a new innovative global shutter pixel design optimized for the accurate and fast capture of moving scenes at full resolution 120 frame per second. The sensor produces clear, low noise images in both low-light and bright scenes. It includes sophisticated camera functions such as auto exposure control, windowing, row skip mode, column-skip mode, pixel-binning and both video and single frame modes. It is programmable through a simple two-wire serial interface. The

AR0234AT produces extraordinarily clear, sharp digital pictures with an industry leading Global Shutter Efficiency, and its ability to capture both continuous video and single frames make it the perfect choice for a wide range of applications, including automotive incabin systems.

### **Features**

- Superior Low-light and IR Performance
- HD Video (1080p120)
- 4-lane MIPI or Parallel Data Interface
- Automatic Black Level Calibration (ABLC)
- · Programmable Control for Region Of Interest (ROI)
- · Horizontal and Vertical Mirroring, Windowing and Pixel Binning
- On-chip Auto Exposure Control for Any Programmable ROI
- 5 x 5 Statistics Engine for Any Programmable ROI
- Flexible Control for Row and Column Skip Mode
- On-chip Slave or Trigger Mode for Synchronization For more features, see the data sheet

## **Applications**

- In cabin automotive
- · Gesture Recognition
- Iris Scanning
- Head Roll
- · Eye Tracking

| Part Electrical Specifications |                   |   |        |      |                |                        |                   |                   |                       |                     |       |                 |
|--------------------------------|-------------------|---|--------|------|----------------|------------------------|-------------------|-------------------|-----------------------|---------------------|-------|-----------------|
| Product                        | Pricing (\$/Unit) | Compliance  | Status | Туре | Megapix<br>els | Frame<br>Rate<br>(fps) | Optical<br>Format | Shutter<br>Type   | Pixel<br>Size<br>(µm) | Output<br>Interface | Color | Package<br>Type |
| AR0234ATSM28XUEA0<br>-DPBR-E   |                   | AEC<br>Qualified<br>PPAP<br>Capable<br>Pb-free<br>Halide free | Active |      | 2.3            | 120                    | 1/2.3<br>inch     | Global<br>Shutter | 3.0 x 3.0             | MIPI<br>Parallel    | Mono  | IBGA-76         |
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For more information please contact your local sales support at www.onsemi.com.

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