

## AR0234CS

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

## Product Overview

For complete documentation, see the data sheet.

The AR0234CS is a 1/2.6inch 2Mp CMOS digital image sensor with an activepixel array of 1920 (H) x 1200 (V). It incorporates a new innovative global shutter pixel design optimized for accurate and fast capture of moving scenes at 120 frame per second, full resolution. The sensor produces clear, low noise images in both lowlight and bright scenes. It includes sophisticated camera functions such as auto exposure control, windowing, row skip mode, columnskip mode, pixelbinning, and both video and single frame modes. It is programmable through a simple twowire serial interface. The AR0234CS produces extraordinarily clear, sharp digital pictures with an industry leading Global Shutter Efficiency, and its ability to capture both continuous video and single frames makes it the perfect choice for a wide range of applications, including scanning, autonomous mobility, surveillance and industrial quality control.

## Features

- Best in Class Global Shutter Efficiency
- Low Dark Current/Hot Pixels
- High Linear Full Well
- Low Operational Power
- Small Form Factor
- Built-In Statistics Engine
- Multiple Functional Modes - Row & Col Skip Modes, Pixel Binning

## Applications

- Gesture recognition
- 3D scanning
- Position tracking
- Machine vision
- AR/VR/MR/XR

## End Products

- Autonomous Mobile Robots
- Autonomous Guide Vehicles (Drones)
- Video Doorbells
- AR/VR/MR Headsets
- Barcode Readers

## Part Electrical Specifications

| Product              | Status         | Compliance                                                                          | Type | Megapixels | Frame Rate (fps) | Optical Format | Shutter Type   | Pixel Size (μm) | Output Interface | Color      | Family | Packaging Type | CASE Outline | MSL Type | MSL Temp (°C) | Container Type | Container Qty. |
|----------------------|----------------|-------------------------------------------------------------------------------------|------|------------|------------------|----------------|----------------|-----------------|------------------|------------|--------|----------------|--------------|----------|---------------|----------------|----------------|
| AR0234CSSC00SUD20    | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | -              |              | NA       | 0             | MTFRM          | 1              |
| AR0234CSSC00SUKA0-CP | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSC00SUKA0-CR | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSC28SUD20    | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | -              |              | NA       | 0             | MTFRM          | 1              |
| AR0234CSSC28SUKA0-CP | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSC28SUKA0-CR | Active         |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Color      | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSM00SUD20    | Last Shipments |    | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Monochrome | -      | -              |              | NA       | 0             | MTFRM          | 1              |
| AR0234CSSM00SUKA0-CP | Active         |  | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Monochrome | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSM00SUKA0-CR | Active         |  | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Monochrome | -      | OD CSP -83     | 570 CK. PDF  | 4        | 245           | CTRAY          | 2100           |
| AR0234CSSM28SUD20    | Last Shipments |  | CMOS | 2.3        | 120              | 1/2.6 inch     | Global Shutter | 3.0 x 3.0       | Parallel         | Monochrome | -      | -              |              | NA       | 0             | MTFRM          | 1              |
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