

AS0149AT

Hayabusa CMOS Image Sensor SOC, 1.3 MP, 1/4", RGB, Rolling Shutter

Product Overview

For complete documentation, see the data sheet.

AS0149AT is a 1/4 inch, singlechip CMOS digital image sensor SOC. It captures highquality color images with a 1312 H x 986 V activepixel array, and outputs formats with RGB888, YUV422, BT.656 or BT.601. This advanced automotive sensor captures images in either linear, or high dynamic range, with rollingshutter readout. AS0149AT is optimized for both low light and challenging high dynamic range scene performance, with a 3 µm BSI pixel and onsensor up to 120 dB HDR capture capability. The sensor includes flexible functions such as windowing, and both video and single frame modes. The device is programmable through a simple twowire serial interface, and supports both MIPI CSI2 and Parallel output interfaces. The AS0149 is a complete cameraonachip, it performs sophisticated processing functions including color and gamma correction, auto white balance, distortion correction, overlays, ALTM (Adaptive Local ToneMapping) and supports SuperExposure HDR mode

Features

- HighPerformance 3.0 µm BSI Pixel,with SuperExposure HDR Mode
- Combined HDR RAW Output, up to 20bit (>120 dB)
- RAW bypass capability
- Auto exposure, auto white balance, distortion correction and overlays
- Adaptive Local Tone Mapping (ALTM)
- Selectable Automatic or User Controlled Black level control

Applications

- Automotive Viewing
- Automotive ADAS

End Products

- Rear View Camera (RVC)
- Camera Mirror Replacement System (CMS)
- Surround View Camera (SVC)

Part Electrical Specifications

Product	Status	Compliance	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.
AS0149ATSC00XUEA1-DPBR	Active		CMOS	1.3	30	1/4 inch	Electronic Rolling	3.0 x 3.0	Parallel	RGB	IBGA-89	503 CM. PDF	3	260	JTRAY	3000
AS0149ATSC00XUEA1-DRBR	Active		CMOS	1.3	30	1/4 inch	Electronic Rolling	3.0 x 3.0	Parallel	RGB	IBGA-89	503 CM. PDF	3	260	JTRAY	3000
AS0149ATSC00XUEA1-TPBR	Active		CMOS	1.3	30	1/4 inch	Electronic Rolling	3.0 x 3.0	Parallel	RGB	IBGA-89	503 CM. PDF	3	260	REEL	1500
AS0149ATSC00XUEA1-TRBR	Active		CMOS	1.3	30	1/4 inch	Electronic Rolling	3.0 x 3.0	Parallel	RGB	IBGA-89	503 CM. PDF	3	260	REEL	1500