AR0830

Image Sensor, 8.3 MP, Rolling Shutter, Hyperlux™ LP

Product Overview

For complete documentation, see the data sheet.

AR0830, belongs to **onsemi's** Hyperlux LP product family, is a 1/2.9inch Back-Side Illuminated (BSI) Stacked CMOS digital image sensor with a 3840 x 2160 activepixel array. This advanced sensor captures images in either linear or enhanced Dynamic Range (eDR) modes, with a rollingshutter readout. The AR0830 is architected & designed to deliver highquality performance consuming very low power. It is supported by a 1.4 m BSI pixel from **onsemi** and delivers excellent performance in lowlight & NIR wavelengths. The features of the AR0830 provides a powerful data capturing device at the edge that can be programmed through several options to deliver optimal bandwidth at very low power.

Features

- Lowest Power Consumption among Comparable Offerings in the Industry

- Enhanced NIR Response in 850nm & 940nm Wavelength

- Wake on Motion (WOM)

- Multiple Subsampling Modes - Binning, summing, Skipping, Windowing

- Multiple Functional Modes - Global Reset Release (GRR), Trigger, Context Switching

- enhanced Dynamic Range (eDR) & Line Interleaved HDR (LI-HDR) Modes

Applications

- Videoconferencing
- Smart Access
- Virtual & Augmented Reality
- Machine Vision
- Retail Analytics

End Products

- VC Endpoints, Webcam
- Video Doorbells
- AR/VR/XR Headsets
- Machine Vision Cameras
- Retail In-store Cameras

Part Electrical Specifications

Product	Status	Compilance	Type	Meg apixels	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.
AR0830CSSC11SMD20	Active	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSC11SMKA0-CP-E	Consult Sales Office	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	CSP59 6.41x3.91x0.62, 0.50P	570AV.PDF	5	260	CTRAY	1
AR0830CSSC35SMD20	Active	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSH11SMKA0-CP-E	Consult Sales Office	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	ODCSP59 6.41x3.91x0.63, 0.50P	570AV.PDF	4	245	CTRAY	1
AR0830CSSM11SMKA0-CP-E	Consult Sales Office	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	Mono	CSP59 6.41x3.91x0.62, 0.50P	570AV.PDF	5	260	CTRAY	1