

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	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.
AR0830CSSC11 SMD20	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSC11 SMD20-RC1	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSC11 SMKA1-CP	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	3000
AR0830CSSC11 SMKA1-CP2	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	50
AR0830CSSC3 5SMD20	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSC3 5SMD20-RC1	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	-		NA	0	MTFRM	1
AR0830CSSC3 5SMKA1-CP	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	3000

AR0830CSSC35SMKA1-CP2	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	50
AR0830CSSH11SMD20	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	-		NA	0	MTF RM	1
AR0830CSSH11SMD20-RC1	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	-		NA	0	MTF RM	1
AR0830CSSH11SMKA1-CP	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	3000
AR0830CSSH11SMKA1-CP2	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	50
AR0830CSSH35SMKA1-CP	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	3000
AR0830CSSH35SMKA1-CP2	Active, New		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB-IR	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	50
AR0830CSSM11SMKA1-CP	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	Monochrome	ODC SP59 6.41 x3.91x0.63, 0.50 P	570 AY.P DF	4	245	CTR AY	3000

AR0830CSSM11 SMKA1-CP2	Active		CM OS	8.3	60	1/3 inch	Elec troni c Rolli ng and Glob al Rese t Rele ase	1.4 x 1.4	MIPI	Mon o	ODC SP5 9 6.41 x3.9 1x0. 63, 0.50 P	570 AY.P DF	4	245	CTR AY	50
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