

## 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  $\mu$ 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	Packaging Type	Case Outline	MSL Type	MSL Temp (°C)	Container Type	Container Qty.	2503536
AR0830CSSC11 SMD20	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	-	
AR0830CSSC11 SMD20-RC1	Active	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	-	
AR0830CSSC11 SMKA1-CP	Active	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	OD CSP 59 6.41 x3.9 1x0.63, 0.5 OP	570 AY. PDF	4	245	CTRAY	3000	-
AR0830CSSC11 SMKA1-CP2	Active	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	OD CSP 59 6.41 x3.9 1x0.63, 0.5 OP	570 AY. PDF	4	245	CTRAY	50	-
AR0830CSSC3 5SMD20	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	-	
AR0830CSSC3 5SMD20-RC1	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	-	
AR0830CSSC3 5SMKA1-CP	Active	H Pb	CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	OD CSP 59 6.41 x3.9 1x0.63, 0.5 OP	570 AY. PDF	4	245	CTRAY	3000	-

AR0830CSSC3 5SMKA1-CP2	Active		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	50	-
AR0830CSSH11 SMD20	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	-		NA	0	MT FR M	1	-
AR0830CSSH11 SMD20-RC1	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	-		NA	0	MT FR M	1	-
AR0830CSSH11 SMKA1-CP	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	300 0	-
AR0830CSSH11 SMKA1-CP2	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	50	-
AR0830CSSH3 5SMKA1-CP	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	300 0	-
AR0830CSSH3 5SMKA1-CP2	Active, New		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	RGB -IR	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	50	-
AR0830CSSM11 SMKA1-CP	Active		CM OS	8.3	60	1/3 inch	Electron ic Rolling and Global Reset Release	1.4 x 1.4	MIPI	Mon o	OD CSP 59 6.41 x3.9 1x0. 63, 0.5 OP	570 AY. PDF	4	245	CTR AY	300 0	-

AR0830CSSM11 SMKA1-CP2	Active		CMOS	8.3	60	1/3 inch	Electronic Rolling and Global Reset Release	1.4 x 1.4	MIPI	Mono	OD CSP 596.41 x 3.91 x 0.63, 0.50P	570 AY. PDF	4	245	CTRAY	50	-
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