



Product Overview

KAF-8300: Full Frame CCD, Image Sensor, 8.3 MP

For complete documentation, see the data sheet

Product Description

The KAF-8300 Image Sensor is a 22.5mm diagonal (Four Thirds Format) high performance color or monochrome full frame CCD (charge-coupled device) image sensor designed for a wide range of image sensing applications including digital imaging. Each pixel contains blooming protection by means of a lateral overflow drain thereby preventing image corruption during high light level conditions. For the color version, each of the 5.4µm square pixels are patterned with an RGB mosaic color filter with overlying microlenses for improved color response and reproduction. Several versions of monochrome devices are available with or without microlenses.

The sensor utilizes the TRUESENSE Transparent Gate Electrode to improve sensitivity compared to the use of a standard front side illuminated polysilicon electrode.

Features

- TRUESENSE Transparent Gate Electrode for high sensitivity
- High Resolution
- High Dynamic Range
- Low Noise Architecture

Applications

- Digitization
- Medical
- Scientific

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Color	Package Type
KAF-8300-AAB-CB-AA	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AAB-CB-AE	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CB-AA	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CB-AE	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CD-AA	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CD-AE	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CP-AA	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-AXC-CP-AE	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Mono	CDIP-32
KAF-8300-CXB-CB-AA-OFFSET	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Bayer Color	CDIP-32
KAF-8300-CXB-CB-AE-OFFSET	Pb-free Halide free	Active	Full Frame CCD	8.3	2.9	4/3 inch		5.4 x 5.4	Bayer Color	CDIP-32

For more information please contact your local sales support at www.onsemi.com

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