

Product Overview

KAF-16803: Full Frame CCD Image Sensor, 16.8 MP

For complete documentation, see the data sheet.

The KAF-16803 image sensor is a redesigned version of the popular KAF-16801 image sensor (4096 x 4096 pixel resolution), with enhancements that specifically target the needs of high performance digital radiography applications. Improvements include enhanced quantum efficiency for improved DQE at higher spatial frequencies, lower noise for improved contrast in areas of high density, and anti-blooming protection to prevent image bleed from over exposure in regions outside the patient.

The sensor utilizes a Transparent Gate Electrode to improve sensitivity compared to the use of a standard front side illuminated polysilicon electrode, as well as microlenses to maximize light sensitivity. When combined with large imaging area and small pixel size, the KAF-16803 provides the sensitivity, resolution and contrast necessary for high quality digital radiographs. To simplify device integration, the KAF-16803 image sensor uses the same pin-out and package as the KAF-16801E image sensor.

Features

- Transparent Gate Electrode for high sensitivity
- High Resolution
- Large Image Area
- High Quantum Efficiency
- Low Noise Architecture
- Broad Dynamic Range

Applications

- Medical
- Scientific

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
KAF-16803-ABA-DD-AE	Pb-free Halide free	Active	Full Frame CCD	16.8	0.2	645 1.3x	-	9.0 x 9.0	Analog	Mono	CDIP-34
KAF-16803-ABA-DD-BA	Pb-free Halide free	Active	Full Frame CCD	16.8	0.2	645 1.3x	-	9.0 x 9.0	Analog	Mono	CDIP-34
KAF-16803-ABA-DP-AE	Pb-free Halide free	Active	Full Frame CCD	16.8	0.2	645 1.3x	-	9.0 x 9.0	Analog	Mono	CDIP-34
KAF-16803-ABA-DP-BA	Pb-free Halide free	Active	Full Frame CCD	16.8	0.2	645 1.3x	-	9.0 x 9.0	Analog	Mono	CDIP-34

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

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