

## Product Overview

### KAF-09001: Full Frame CCD Image Sensor, 9.1 MP

For complete documentation, see the data sheet.

This product is not recommended for new designs

The KAF-09001 image sensor provides advanced imaging performance for demanding applications such as next-generation low cost digital still/motion radiography and scientific imaging systems. Building on the success of the KAF-09000 image sensor, the KAF-09001 combines high resolution and outstanding sensitivity with an updated output design that provides a 10x increase in full-resolution frame rate, along with support for binned output that provides even faster throughput. The high sensitivity and improved frame rate of the KAF-09001 directly enable lower patient exposure in medical applications and improved productivity in scientific imaging.

A high sensitivity 12 micron full frame CCD pixel design combines with a low noise output architecture to allow system designers to improve overall image quality or relax system tolerances to reduce cost. Excellent uniformity preserves overall image integrity by simplifying image corrections, while integrated anti-blooming protection prevents image bleed from overexposure in bright areas of the image.

#### Features

- High sensitivity 12  $\mu\text{m}$  pixels
- 10 fps readout with 3 x 3 binning
- High Dynamic Range
- Low Noise Architecture

#### Benefits

- Reduces light (or X-Ray dosage) needed to capture image
- Enables high sensitivity video preview mode
- Captures critical details in highlights and shadows
- Enables capture of low signal levels

#### Applications

- Medical
- Scientific

#### Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size ( $\mu\text{m}$ )	Output Interface	Color	Package Type
KAF-09001-ABA-DD-AE	Pb-free	Active	Full Frame CCD	9.1	5	645 1.3x	-	12 x 12	Analog	Mono	CDIP-60
	Halide free										
KAF-09001-ABA-DD-BA	Pb-free	Active	Full Frame CCD	9.1	5	645 1.3x	-	12 x 12	Analog	Mono	CDIP-60
	Halide free										
KAF-09001-ABA-DP-AE	Pb-free	Active	Full Frame CCD	9.1	5	645 1.3x	-	12 x 12	Analog	Mono	CDIP-60
	Halide free										
KAF-09001-ABA-DP-BA	Pb-free	Active	Full Frame CCD	9.1	5	645 1.3x	-	12 x 12	Analog	Mono	CDIP-60
	Halide free										

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 9/21/2019