



Product Overview

KAF-40000: Full Frame CCD, Image Sensor, 40.0 MP

For complete documentation, see the [data sheet](#)

Product Description

The KAF-40000 Image Sensor is a high performance, 40-megapixel CCD. Based on the TRUESENSE 6.0 micron Full Frame CCD Platform, the sensor features ultra-high resolution, broad dynamic range, and a four-output architecture. A lateral overflow drain suppresses image blooming, while an integrated Pulse Flush Gate clears residual charge on the sensor with a single electrical pulse. A Fast Dump Gate can be used to selectively remove a line of charge to facilitate partial image readout. The sensor also utilizes the TRUESENSE Transparent Gate Electrode to improve sensitivity compared to the use of a standard front side illuminated polysilicon electrode.

The sensor shares a common pin-out and electrical configuration with the KAF-50100 Image Sensor, allowing a single camera design to support both members of this sensor family.

Features

- TRUESENSE Transparent Gate Electrode for high sensitivity
- Ultra-high resolution
- Broad dynamic range
- Low noise architecture
- Large active imaging area

Applications

- Digitization
- Mapping / Aerial
- Photography

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Color	Package Type
KAF-40000-CXA-JD-AA	Pb-free Halide free	Active	Full Frame CCD	40	1.3	645 1.3x		6.0 x 6.0	Bayer Color	CPGA-52
KAF-40000-CXA-JD-AE	Pb-free Halide free	Active	Full Frame CCD	40	1.3	645 1.3x		6.0 x 6.0	Bayer Color	CPGA-52

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

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