



## Product Overview

### KAI-08051: Interline Transfer CCD Image Sensor, 8.1 MP

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

#### Product Description

The KAI-08051 Image Sensor is an 8-megapixel CCD in a 4/3" optical format that provides increased QE, reduced read noise, and improved color accuracy compared to earlier generation devices in the TRUESENSE 5.5 micron Interline Transfer CCD family. The sensor features broad dynamic range, excellent imaging performance, and a flexible readout architecture that enables use of 1, 2, or 4 outputs. Full resolution readout is supported at up to 16 frames per second, a Region of Interest (ROI) mode supports partial readout of the sensor at even higher frame rates.

The sensor is available with the TRUESENSE Sparse Color Filter Pattern, which provides a 2x improvement in light sensitivity compared to a standard color Bayer part.

The sensor shares common pin-out and electrical configurations with other devices based on the TRUESENSE 5.5 micron Interline Transfer Platform, allowing a single camera design to support multiple members of this family.

#### Features

- Increased QE, reduced read noise, and improve color accuracy
- Bayer Color Pattern, TRUESENSE Sparse Color Filter Pattern, and Monochrome configurations
- Progressive scan readout
- Flexible readout architecture
- High frame rate
- High sensitivity, low noise architecture
- Excellent smear performance
- Package pin reserved for device identification

#### Applications

- Intelligent Transportation Systems
- Machine Vision
- Medical
- Scientific
- Surveillance

## Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (μm)	Color	Package Type
KAI-08051-AAA-JP-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-AAA-JP-BA	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-ABA-JD-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-ABA-JD-BA	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-ABA-JP-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-ABA-JP-BA	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-08051-FBA-JB-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-08051-FBA-JB-B2	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-08051-FBA-JD-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-08051-FBA-JD-BA	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-08051-QBA-JD-AE	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CPGA-67
KAI-08051-QBA-JD-BA	Pb-free Halide free	Active	Interline CCD	8.1	16	4/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CPGA-67

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

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