



## Product Overview

### KAI-02150: Interline Transfer CCD Image Sensor, 2.1 MP

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

#### Product Description

The KAI-02150 Image Sensor is a 1080p (1920 x 1080) CCD in a 2/3" (11 mm diagonal) optical format. Based on the TRUESENSE 5.5-micron Interline Transfer CCD Platform, the sensor features broad dynamic range, excellent imaging performance, and a flexible readout architecture that enables use of 1, 2, or 4 outputs for full resolution readout up to 64 frames per second. A vertical overflow drain structure suppresses image blooming and enables electronic shuttering for precise exposure control.

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

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

#### Features

- 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

- Industrial Imaging
- Medical Imaging
- Security

## Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (μm)	Color	Package Type
KAI-02150-AAA-JP-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-AAA-JP-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-ABA-FD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CLCC-64
KAI-02150-ABA-FD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CLCC-64
KAI-02150-ABA-JD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-ABA-JD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-ABA-JP-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-ABA-JP-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02150-CBA-FD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02150-CBA-JB-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-CBA-JD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-FBA-FD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02150-FBA-FD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02150-FBA-JB-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-FBA-JB-B2	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-FBA-JB-B2-T	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-FBA-JD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-FBA-JD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02150-PBA-FD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CLCC-64
KAI-02150-PBA-JD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CPGA-67
KAI-02150-QBA-FD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CLCC-64
KAI-02150-QBA-FD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CLCC-64
KAI-02150-QBA-JD-AE	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 inch	Electronic	5.5 x 5.5	Sparse CFA	CPGA-67
KAI-02150-QBA-JD-BA	Pb-free Halide free	Active	Interline CCD	2.1	64	2/3 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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