



Product Overview

KAI-02050: Interline Transfer CCD Image Sensor, 1.9 MP

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

Product Description

The KAI-02050 Image Sensor is a 2-megapixel 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 68 frames per second. A vertical overflow drain structure suppresses image blooming and enables electronic shuttering for precise exposure control. Other features include low dark current, negligible lag, and low smear.

The sensor shares common 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

- Color or 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

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Color	Package Type
KAI-02050-AAA-JP-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-AAA-JP-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-ABA-FD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CLCC-64
KAI-02050-ABA-FD-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CLCC-64
KAI-02050-ABA-JD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-ABA-JD-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-ABA-JP-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-ABA-JP-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Mono	CPGA-67
KAI-02050-CBA-FD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02050-CBA-JB-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-CBA-JD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-FBA-FD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02050-FBA-FD-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CLCC-64
KAI-02050-FBA-JB-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-FBA-JB-B2	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-FBA-JB-B2-T	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-FBA-JD-AE	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67
KAI-02050-FBA-JD-BA	Pb-free Halide free	Active	Interline CCD	1.9	68	2/3 inch	Electronic	5.5 x 5.5	Bayer Color	CPGA-67

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

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