

Product Overview

KAI-01150: Interline Transfer CCD Image Sensor, 0.9 MP

For complete documentation, see the data sheet.

The KAI-01150 Image Sensor is a 720p format (1280 x 720 pixel) CCD in a 1/2" (8 mm diagonal) optical format. Based on an advanced 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 of 138 frames per second. A vertical overflow drain structure suppresses image blooming and enables electronic shuttering for precise exposure control.

The sensor is also available with a 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 5.5 micron Interline Transfer CCD Platform, allowing a single camera design to support multiple members of this sensor family.

Features

- Monochrome, Bayer Color, and Sparse Color Filter Pattern 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)	Output Interface	Color	Package Type
KAI-01150-ABA-JD-AE	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Mono	CPGA-67
KAI-01150-FBA-FD-AE	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Bayer Color	CLCC-64
KAI-01150-FBA-JB-AE	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Bayer Color	CPGA-67
KAI-01150-FBA-JD-AE	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Bayer Color	CPGA-67
KAI-01150-QBA-JD-AE	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Sparse CFA	CPGA-67
KAI-01150-QBA-JD-BA	Pb-free Halide free	Active	Interline CCD	0.9	138	1/2 inch	Electronic	5.5 x 5.5	Analog	Sparse CFA	CPGA-67

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

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