

Product Overview

KAI-47051: Interline Transfer CCD Image Sensor, 47 MP

For complete documentation, see the data sheet.

The KAI-47051 Image Sensor is a 47-megapixel CCD designed for the most demanding inspection and surveillance applications. Based on an advanced 5.5-micron Interline Transfer CCD Platform, the sensor features broad dynamic range and excellent imaging performance and uniformity. Full resolution readout of up to 7 frames per second is enabled through a multi-tap output architecture, and a vertical overflow drain structure suppresses image blooming and enables electronic shuttering for precise exposure control.

The sensor is electrically similar to other devices in the 5.5-micron Interline Transfer CCD Platform, allowing cameras designed for that platform to be leveraged in support of this high-resolution device.

Features

- High Resolution (47 megapixel)
- Monochrome, Bayer Color, and Sparse Color Filter Patter configurations
- High Sensitivity
- Low Noise Architecture

Applications

- Image Capture

End Products

- Industrial Imaging and Inspection camera
- Aerial Surveillance camera
- High-End Security camera
- Machine Vision camera

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
KAI-47051-AXA-JD-AE	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Mono	CPGA-201
KAI-47051-AXA-JD-B1	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Mono	CPGA-201
KAI-47051-AXA-JP-AE	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Mono	CPGA-201
KAI-47051-AXA-JP-B1	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Mono	CPGA-201
KAI-47051-AXA-JP-B2	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Mono	CPGA-201
KAI-47051-FXA-JD-AE	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Bayer Color	CPGA-201
KAI-47051-FXA-JD-B1	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Bayer Color	CPGA-201
KAI-47051-FXA-JD-B2	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Bayer Color	CPGA-201
KAI-47051-QXA-JD-AE	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Sparse CFA	CPGA-201
KAI-47051-QXA-JD-B1	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Sparse CFA	CPGA-201
KAI-47051-QXA-JD-B2	Pb-free Halide free	Active	Interline CCD	46.8	7	645 1.1x	Electronic	5.5 x 5.5	Analog	Sparse CFA	CPGA-201

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

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