



## Product Overview

### KAI-08050: Interline Transfer CCD Image Sensor, 8.1 MP

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

#### Product Description

The KAI-08050 Image Sensor is an 8-megapixel CCD in a 4/3" (22 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. The sensor supports full resolution readout up to 16 frames per second, while a Region of Interest (ROI) mode supports partial readout of the sensor at even higher frame rates. 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 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 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

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

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Created on: 7/11/2015