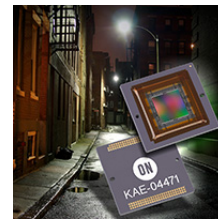


Product Overview

KAE-04471: Interline Transfer EMCCD Image Sensor, 4.4 MP

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



The KAE-04471 Image Sensor is a 4.4 Mp, 4/3" format, Interline Transfer EMCCD image sensor that provides exceptional imaging performance in extreme low light applications. Each of the sensor's four outputs incorporates both a conventional horizontal CCD register and a high gain EMCCD register.

An intra-scene switchable gain feature samples each charge packet on a pixel-by-pixel basis. This enables the camera system to determine whether the charge will be routed through the normal gain output or the EMCCD output based on a user selectable threshold. This feature enables imaging in extreme low light, even when bright objects are within a dark scene, allowing a single camera to capture quality images from sunlight to starlight.

Features

- Intra-Scene Switchable Gain
- Wide Dynamic Range
- Low Noise Architecture
- Exceptional Low Light Imaging
- Global Shutter
- Excellent Image Uniformity and MTF

Applications

- Scientific Imaging
- Medical Imaging
- Surveillance
- Defense Imaging
- Intelligent Transportation Systems

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
KAE-04471-ABA-JP-EE	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-ABA-JP-FA	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-ABA-SD-EE	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-ABA-SD-FA	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-ABA-SP-EE	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-ABA-SP-FA	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Mono	CPGA-155
	Halide free										
KAE-04471-FBA-JP-EE	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Bayer Color	CPGA-155
	Halide free										
KAE-04471-FBA-JP-FA	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Bayer Color	CPGA-155
	Halide free										
KAE-04471-FBA-SD-EE	Pb-free	Active	Interline Transfer-EMCCD	4.4	14	4/3 inch	Electronic	7.4 x 7.4	Analog	Bayer Color	CPGA-155
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For more information please contact your local sales support at www.onsemi.com.

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