



Product Overview

KAI-2020: Interline Transfer CCD Image Sensor, 1.9 MP

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

Product Description

The KAI-2020 Image Sensor is a high performance 2-million pixel sensor designed for a wide range of medical, scientific and machine vision applications. The 7.4 μm square pixels with microlenses provide high sensitivity and the large full well capacity results in high dynamic range. The split horizontal register offers a choice of single or dual output allowing either 18 or 35 frame per second (fps) video rate for the progressively scanned images. Also included is a fast line dump for sub-sampling at higher frame rates. The vertical overflow drain structure provides antiblooming protection and enables electronic shuttering for precise exposure control. Other features include low dark current, negligible lag and low smear.

Features

- High resolution
- High sensitivity
- High dynamic range
- Low noise architecture
- High frame rate
- Binning capability for higher frame rate
- Electronic shutter

Applications

- Intelligent Transportation Systems
- Machine Vision
- Scientific
- Surveillance

Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (μm)	Color	Package Type
KAI-2020-AAA-CF-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-AAA-CF-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-AAA-CR-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-AAA-CR-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-ABA-CD-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-ABA-CD-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-ABA-CR-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-ABA-CR-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Mono	CDIP-32
KAI-2020-CBA-CD-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Bayer Color	CDIP-32
KAI-2020-CBA-CD-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Bayer Color	CDIP-32
KAI-2020-CBA-CR-AE	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Bayer Color	CDIP-32
KAI-2020-CBA-CR-BA	Pb-free Halide free	Active	Interline CCD	1.9	30	1 inch	Electronic	7.4 x 7.4	Bayer Color	CDIP-32

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

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