

## Product Overview

### KAI-1003: Interline Transfer CCD Image Sensor, 1 MP

For complete documentation, see the data sheet.

The KAI-1003 Image Sensor is a high-performance megapixel monochrome image sensor designed for a wide range of medical imaging and machine vision applications. The 12.8  $\mu\text{m}$  square pixels with microlenses provide high sensitivity and the large capacity results in large dynamic range. The two output, split horizontal register and several binning modes allow a 15 to 60 frame per second (fps) video rate for the progressively scanned images. 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

- Megapixel Progressive Scan Interline CCD
- 1024(H) x 1024(V) Imaging Pixels
- 12.8  $\mu\text{m}$  Square Pixels
- 13.1 mm Square Imaging Area
- Microlenses for Increased Sensitivity
- Large capacity (170ke)
- Split Horizontal Register for 1 or 2 Outputs
- Binning to 1 x 2 or 2 x 2

### Applications

- Machine Vision
- Medical
- Scientific

### Part Electrical Specifications

Product	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size ( $\mu\text{m}$ )	Output Interface	Color	Package Type
KAI-1003-AAA-CR-AE	Pb-free Halide free	Active	Interline CCD	1	30	4/3 inch	Electronic	12.8 x 12.8	Analog	Mono	CDIP-28
KAI-1003-AAA-CR-B2	Pb-free Halide free	Active	Interline CCD	1	30	4/3 inch	Electronic	12.8 x 12.8	Analog	Mono	CDIP-28
KAI-1003-ABA-CD-AE	Pb-free Halide free	Active	Interline CCD	1	30	4/3 inch	Electronic	12.8 x 12.8	Analog	Mono	CDIP-28
KAI-1003-ABA-CD-B2	Pb-free Halide free	Active	Interline CCD	1	30	4/3 inch	Electronic	12.8 x 12.8	Analog	Mono	CDIP-28

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

Created on: 8/23/2019