

Product Overview

KAI-04022: Interline Transfer CCD Image Sensor, 4.2 MP

For complete documentation, see the data sheet.

<center>This product is not recommended for new designs </center>

The KAI-04022 Image Sensor is a high-performance 4-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 two high-speed outputs and binning capabilities allow for 16-50 frames 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

- 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) | Output Interface | Color | Package Type |
|---------------------|-------------|--------|---------------|------------|------------------|----------------|--------------|------------------------------|------------------|-------------|--------------|
| KAI-04022-FBA-CD-AE | Pb-free | Active | Interline CCD | 4.2 | 16 | 4/3 inch | Electronic | 7.4 x 7.4 | Analog | Bayer Color | CDIP-34 |
| | Halide free | | | | | | | | | | |
| KAI-04022-FBA-CD-BA | Pb-free | Active | Interline CCD | 4.2 | 16 | 4/3 inch | Electronic | 7.4 x 7.4 | Analog | Bayer Color | CDIP-34 |
| | Halide free | | | | | | | | | | |
| KAI-04022-FBA-CR-AE | Pb-free | Active | Interline CCD | 4.2 | 16 | 4/3 inch | Electronic | 7.4 x 7.4 | Analog | Bayer Color | CDIP-34 |
| | Halide free | | | | | | | | | | |
| KAI-04022-FBA-CR-BA | Pb-free | Active | Interline CCD | 4.2 | 16 | 4/3 inch | Electronic | 7.4 x 7.4 | Analog | Bayer Color | CDIP-34 |
| | Halide free | | | | | | | | | | |

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

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