

PRODUCT SUMMARY

KODAK KLI-6013 IMAGE SENSOR

6002 X 3 TRI-LINEAR CCD IMAGE SENSOR

DESCRIPTION

The KODAK KLI-6013 Image Sensor is a multispectral, linear solid-state image sensor for color scanning applications where high resolution and high dynamic range are required. The imager consists of three parallel linear photodiode arrays each with 6000 active photosites for the output of R, G, and B signals. This device offers high sensitivity, high data rates, low noise and negligible lag. Individual electronic exposure control for each color allows the sensor to be used under a variety of illumination conditions. There are 16 light-shielded elements at each end of each array.



FEATURES

- Tri-Linear Color Array 3 x 6002 pixels
- 8 line spacing between color channels
- Single shift register per channel
- High off-band spectral rejection
- Dark reference pixels provided
- Antireflective glass
- Wide dynamic range, low noise
- No image lag
- Electronic exposure control
- High charge transfer efficiency
- Two-phase register clocking
- 74ACT logic compatible clocks
- 10MHz maximum data rate

APPLICATIONS

- Photography
- Industrial Imaging
- Scientific Imaging

Parameter	Typical Value
Architecture	3 Channel, RGB Trilinear CCD
Pixel Count	6002 x 3
Pixel Size	12 μm (H) x 12 μm (V)
Pixel Pitch	12 μm
Inter-Array Spacing	96 μm (8 lines effective)
Imager Size	72.0 mm (H) x 0.20 mm (V)
Saturation Signal	275,000 electrons
Dynamic Range	72 dB
Responsivity (wavelength = 460, 550, 650 nm)	19, 24, 33 V/ $\mu\text{J}/\text{cm}^2$
Output Sensitivity	8 $\mu\text{V}/\text{electron}$
Dark Current	0.02 pA/pixel
Dark Current Doubling Rate	9° C
Charge Transfer Efficiency	0.99999/Transfer
Photoresponse Non-uniformity	6% Peak-Peak
Lag (First Field)	0.5%
Maximum Data Rate	10 MHz/Channel

Parameters above are specified at T = 23°C (junction temperature) and 1 MHz clock rates unless otherwise noted.

ORDERING INFORMATION

Catalog Number	Product Name	Description
4H0625	KLI- 6013-AAA-EB-AA	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass (no coatings), Standard Grade
4H0631	KLI- 6013-AAA-EB-AE	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass (no coatings), Engineering Sample
4H0620	KLI- 6013-AAA-ED-AA	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Standard Grade
4H0626	KLI- 6013-AAA-ED-AE	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Engineering Sample
4H0624	KLI- 6013-DAA-EB-AA	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass (no coatings), Standard Grade
4H0630	KLI- 6013-DAA-EB-AE	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass (no coatings), Engineering Sample
4H0622	KLI- 6013-DAA-ED-AA	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Standard Grade
4H0628	KLI- 6013-DAA-ED-AE	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Engineering Sample
4H0092	KEK-4H0092-KLI-6013-12-5	Evaluation Board (Complete Kit)

Please see ISS Application Note “Product Naming Convention” (MTD/PS-0892) for a full description of naming convention used for KODAK image sensors.

Address all inquiries and purchase orders to:

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