

PRODUCT SUMMARY

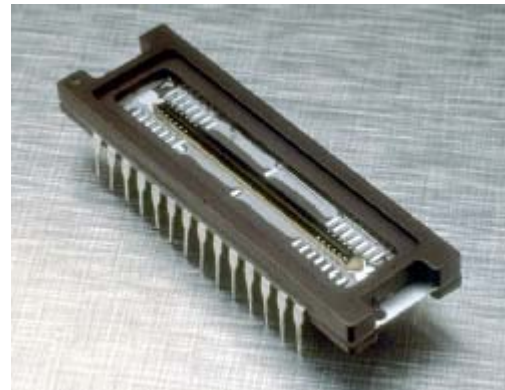
KODAK KLI-2113 IMAGE SENSOR

2098 X 3 TRI-LINEAR CCD IMAGE SENSOR

DESCRIPTION

The KODAK KLI-2113 Image Sensor is a high dynamic range, multispectral, linear CCD image sensor ideally suited for demanding color scanner applications.

The imager consists of three parallel 2098-element photodiode arrays—one for each primary color. The KLI-2113 sensor offers high sensitivity, a high data rate, low noise and negligible lag. Independent exposure control for each channel allows color balancing at the front end. CMOS-compatible 5V clocks, and single 12V DC supply are all that are required to drive the KLI-2113 sensor, simplifying the design of interface electronics.



FEATURES

- High Resolution
- Wide Dynamic Range
- High Sensitivity
- High Operating Speed
- High Charge Transfer Efficiency
- No Image Lag
- Electronic Exposure Control
- Pixel Summing Capability
- Up to 2.0V peak-peak Output
- 5.0V Clock Inputs
- Two-Phase Register Clocking
- On-chip Dark Reference

APPLICATIONS

- Photography
- Industrial Imaging
- Scientific Imaging

Parameter	Typical Value
Architecture	3 Channel, RGB Tri-linear CCD
Pixels Count	2098 x 3
Pixel Size	14 μm (H) x 14 μm (V)
Pixel Pitch	14 μm
Inter-Array Spacing	112 mm (8 lines effective)
Imager Size	29.37 mm (H) x 0.24 mm (V)
Saturation Signal	170,000 electrons
Dynamic Range	76 dB
Responsivity (Wavelength = 460, 540, 650 nm)	25, 32, 50 $\text{V}/\mu\text{J}/\text{cm}^2$
Output Sensitivity	11.5 $\mu\text{V}/\text{electron}$
Dark Current	0.02 pA/pixel
Dark Current Doubling Rate	9° C
Charge Transfer Efficiency	0.99999/Transfer
Photoresponse Non-uniformity	5% Peak-Peak
Lag (First Field)	0.6%
Maximum Data Rate	20 MHz/Channel
Package	CERDIP (Sidebrazed, CuW)
Cover Glass	AR coated, 2 sides

Parameters above are specified at $T = 23^\circ\text{C}$ (junction temperature) and 2 MHz clock rates unless otherwise noted.

ORDERING INFORMATION

Catalog Number	Product Name	Description	Marking Code
4H0602	KLI- 2113-AAA-ER-AA	Monochrome, No Microlens, CERDIP Package (leadframe), Taped Clear Cover Glass with AR coating (2 sides), Standard Grade	KLI-2113-AAA (Serial Number)
4H0605	KLI- 2113-AAA-ER-AE	Monochrome, No Microlens, CERDIP Package (leadframe), Taped Clear Cover Glass with AR coating (2 sides), Engineering Sample	
4H0601	KLI- 2113-AAB-ED-AA	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Standard Grade	KLI-2113-AAB (Serial Number)
4H0604	KLI- 2113-AAB-ED-AE	Monochrome, No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Engineering Sample	
4H0600	KLI- 2113-DAA-ED-AA	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Standard Grade	KLI-2113-DAA (Serial Number)
4H0603	KLI- 2113-DAA-ED-AE	Color (RGB), No Microlens, CERDIP Package (leadframe), Clear Cover Glass with AR coating (both sides), Engineering Sample	
4H0096	KEK-4H0096-KLI-2113-12-5	Evaluation Board (Complete Kit)	N/A

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

For all reference documentation, please visit our Web Site at www.kodak.com/go/imagers.

Please address all inquiries and purchase orders to:

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