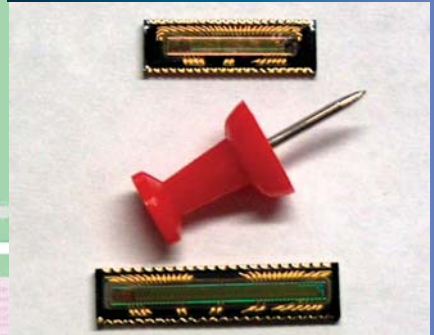




# DLIS-2K/4K

RE-CONFIGURABLE CMOS DIGITAL LINEAR IMAGE SENSOR



Panavision Imaging, LLC, announces the DLIS-2K & DLIS-4K re-configurable line scan CMOS image sensors. The sensors feature oversampling for enhanced sensitivity and High Dynamic Range (HDR) imaging. The DLIS-2K and 4K sensor consists of 4 independently selectable and resettable rows with 2080 or 4096 optical each and a high resolution mode of 4160 or 8192 pixels each respectively. Three rows feature 4 micron square pixels and the 4th row featuring 4 micron wide X 32 micron tall pixels. The 4 X 32 micron pixel has sensitivity exceeding 100 V/Lux.Sec. Row integration time is controlled by direct external control or internal programmable control via a 3-wire serial interface. The Distributed Analog to Digital converter (D/AD™) per pixel has selectable resolution of 7-11 bits and a one bit output with selectable threshold.

## High Sensitivity: 100 V/Lux.Sec.

The DLIS-2K & 4K are user configurable to satisfy a wide range of demanding applications. The DLIS-2K and 4K can output full single row data at 13000 fps or 8000 fps at 8bits respectively, for higher speed applications. Automatic Dynamic Threshold™ (ADT™) with binary output provides an Integrated and cost reducing solution for bar code and positioning applications. Featured readout modes: Correlated Double Sampling (CDS), ambient light subtraction, oversampling, non-destructive read, binning of different integrations & rows, and a high resolution mode. The high resolution mode of 4K and 8K pixels for the DLIS-2K and 4K respectively, is from reading two rows of 4 micron pixels, offset 2 microns. Both imagers have programmable gain & offset (2 bit control), onboard test mode capabilities, including external input to the A/D for calibration or other external analog input. The imagers feature a power down mode, and tri-state outputs for multiplexing on one data bus. Both sensors operate from a single 3.3v power supply, and are offered in a 40 and 44 pin LCC packages respectively. Engineering samples with demonstration kit are now available.

**\*\* Now Available \*\***

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## KEY FEATURES

- **Four Rows: 1 row of tall pixels (4x32 micron) and 3 rows of square pixels (4x4 micron)**
- **Integrated 11 bit Distributed A/D (D/AD™) with parallel 10 bit digital output**
- **Data Rates to 36 MHz,**
- **Automatic Dynamic Thresholding (ADT™) with binary output**
- **Integrated CDS**

## Multiple Readout modes

- **Ambient Light Subtraction**
- **High Dynamic Range (HDR) 80dB Est.**
- **Over-sampling**
- **Non-Destructive Read mode**
- **Binning of different rows**
- **Gain & Offset (2 bit control)**



# Family of Image Sensors

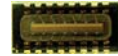
## DLIS-2K, DLIS-4K **Digital Integration Solution**

2080 x 4 / 4096 x 1 Linescan Image Sensors.



## ELIS-1024 **7.8um x 125um Pixel, Full Frame Electronic Shutter**

128 / 256 / 512 / 1024 Enhanced Linescan Image Sensor.



## LIS-1024 **Large Full Well using 7.8um x 125um Pixels**

1024 x 1 Linescan Image Sensor.



## LIS-500 **Lowest Cost Solution for Touch Screen & Barcode**

500 x 1 Linescan Image Sensor.



## RPLIS-2048-EX **Very Low Power and Size**

2048 x 1 Reduced Power Scanning Linescan Image Sensor.



## SLIS-2048 **7um x 7um Pixel, 90MHz ERC**

2048 x 1 High Speed Linescan Image Sensor.

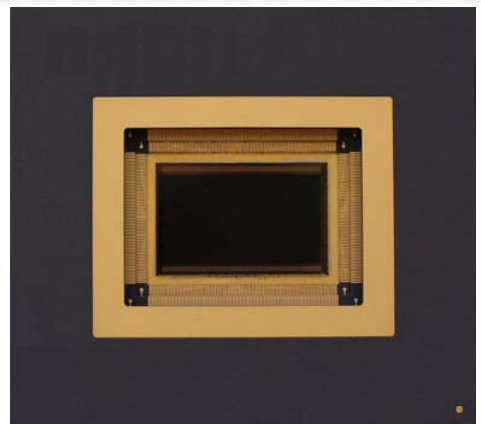


## DYNAMAX™ 35 ULTRA

**37.5 Mega-Pixel, 120 FPS, 35mm Format**

**Over Sampling, High Dynamic Range**

4K HDTV Resolution Area Array Image Sensor.



### About Panavision Imaging:

Based in Homer, New York, Panavision Imaging, LLC is an innovator and developer of high performance image sensors and related technology. The company's products are based on several patented and patent pending technologies including Active Column Sensor™ (ACS®), XtremePIX®, and others. Offering sensors in 2D array, line scan and custom, their products are found in many high-end imaging applications such as high resolution video, X-ray, barcode, spectrometry and others, serving the consumer, commercial, scientific and industrial markets. Panavision Imaging products and technology have demonstrated advantages over competing imaging technologies such as CCD and CMOS APS. For more information please visit [www.PanavisionSVI.com](http://www.PanavisionSVI.com). Tel: 607.749.2000, email: [sales@panavisionsvi.com](mailto:sales@panavisionsvi.com)