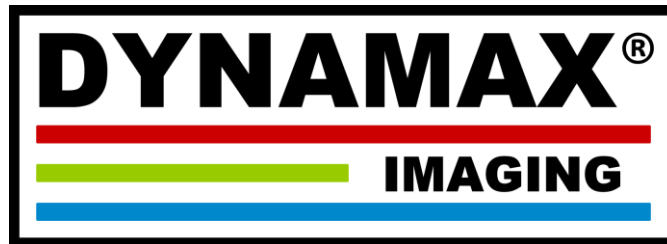


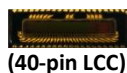
DLISTM 2K

Ultra Configurable Digital Line-Scan Image Sensor



◆ ◆ ◆ 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/ADTM) with parallel 10 bit digital output
- Output speeds to 120 MHz, 18000 fps @ 10bit, 41000 fps @ 8bit Single Row
- Automatic Dynamic Thresholding with binary output; Integrated CDS
- Multiple Readout modes
 - Ambient Light Subtraction
 - High Dynamic Range (HDR)
 - Oversampling
 - Non-Destructive Read mode
 - Binning of different rows
 - 4K pixels - 2 rows of 2K pixels offset by 2 microns
 - Readout one to four rows
- Programmable Gain & Offset (2 bit control)
- External Input to A/D allowed
- Power Down Mode
- Single Power Supply 3.3 Volts
- Semi-custom options available
- Pb free package
- Visit www.dynamax-imaging.com for full details



(40-pin LCC)

◆ ◆ ◆ Brief Description

The DLIS-2K Image Sensor is a Quad Line Scan Sensor with an onboard 11 bit A/D (10bit Video Data Outputs). The sensor features High Dynamic Range (HDR), and Oversampling for Enhanced Sensitivity, and is designed for a wide variety of applications

The DLIS-2K Sensor consists of 4 rows of pixels, each with 2048 optical pixels (2096 total pixels). Three rows are made up of 4 micron x 4 micron square pixels and the other is a row of 4 micron wide X 32 micron tall pixels. There is a 4 micron space between rows. One to four rows may be selected for readout. Each row has independent control of reset and integration.

The background sample can be selected as the reset value for normal Correlated Double Sampling (CDS) or can be selected to be the ambient light sample with integration time controlled by the user. The sensor is programmable via a 3-wire serial interface and combined with our patented high speed Distributed 8 to 11 bit Analog to Digital Converter (D/ADTM), Active Column SensorTM (ACS) and other technologies to enable a powerful imaging combination for the most demanding applications.

◆◆◆ Applications

- Barcode
- Machine Vision
- Edge Detection
- Contact Imaging
- Finger Printing
- Encoding and Positioning

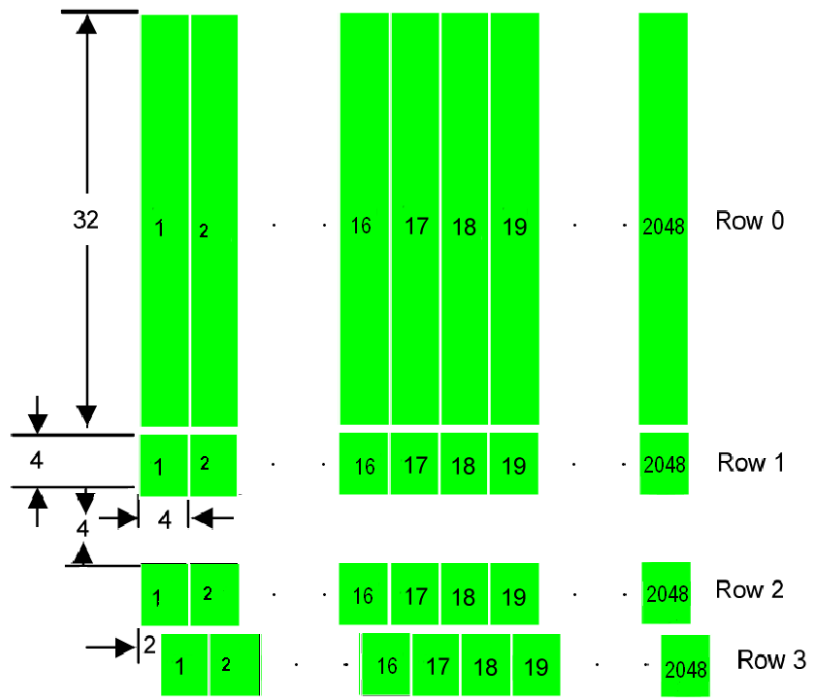


Figure 1: Pixel Array Configuration & Orientation
(Readout Starts at pixel 1, selected row)

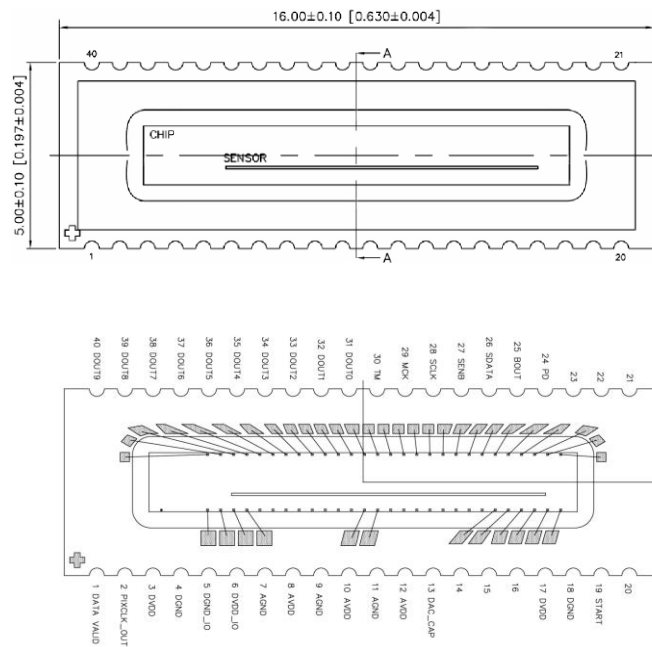


Figure 2: 40-pin LCC Package (P/N DLIS-2KB-LG)
(Pixel Layout Dimensions in Microns)

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DYNAMAX IMAGING, LLC

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