ELIS1024

High Performance
Line-Scan Image Sensor

♦ ♦ ♦ Key Features

- Low cost
- Single supply operation, wide operating range
- Selectable resolutions of 1024, 512, 256 and 128 pixels
- Intelligent power management and Low-power standby mode
- Sample and hold
- Full frame shutter and Dynamic Pixel Reset (DPR) modes
- High sensitivity
- High signal to noise
- Non-destructive read capable, extremely low noise capable via signal averaging
- 1.0 KHz to 30.0 MHz operation clock
- Very low dark current
- Completely integrated timing and control
- Replaces entire CCD systems, not just the sensor
- Visit www.dynamax-imaging.com for full details

(16-pin LCC)

(16-pin DIP)

♦ ♦ ♦ Brief Description

The ELIS-1024 is a high performance near IR image sensor designed to replace CCDs in a wide variety of applications.

ELIS-1024 near IR image sensor consists of an array of high performance, low dark current photo-diode pixels. The sensor features sample and hold capability, selectable resolution and advanced power management. The device can operate at as low as 2.8V making it ideal for portable applications.

A key feature over traditional CCD technology is that the device can be read and reread Non-destructively, allowing the user to maximize signal to noise and dynamic range. The ELIS has on chip Fixed Pattern Noise (FPN) cancellation.

Internal logic automatically reduces power consumption when lower resolution settings are selected. A low power standby mode is also available to reduce system power consumption when the imager is not in use.

Available in a low cost LCC package as well as a high performance dual inline ceramic package.

♦ ♦ ♦ Applications

- Optical Touch Screen
- Edge Detection
- Contact Imaging
- Barcode Reading
- Finger Printing
- Encoding and Positioning
- Machine Vision
- Text Scanning

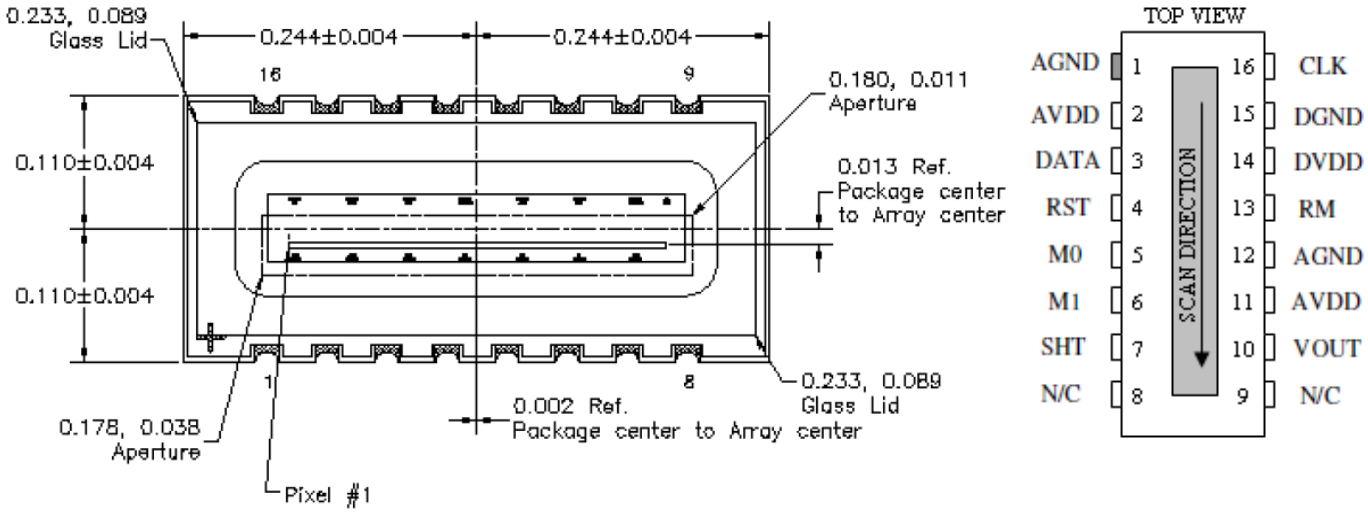

Figure 1: 16-pin LCC Package (P/N ELIS-1024A-LG)
(*other packages available, contact with Dynamax Imaging for details)