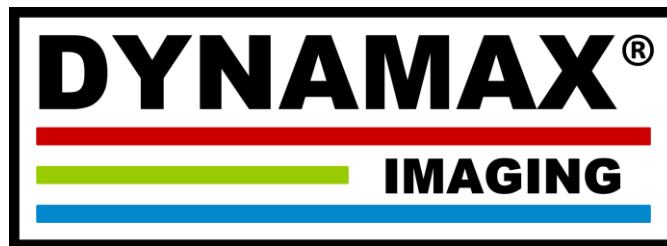


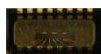
# LIS500

## High Performance Line-Scan Image Sensor



### ◆ ◆ ◆ Key Features

- Single power supply operation, 2.8 Volt to 3.3 Volt
- Low cost compared to CCD multi-chip systems
- High sensitivity
- Simple operation: one clock and up to three control signals
- On chip Fixed Pattern Noise (FPN) cancellation
- Clamping optically black pixels to reference to reduce chip wide offset errors, charge injection and dark current
- Externally programmable x1, x3 gain amplifier
- Control signal for reset of shift register, pixels, integration period and start of readout
- Pixel Size 7.8um x 62.5um
- Imaging active area: 62.5um x 3900um
- Pb free package
- Power down Mode
- Semi-custom options available
- Visit [www.dynamax-imaging.com](http://www.dynamax-imaging.com) for full details



(16-pin LCC)

### ◆ ◆ ◆ Brief Description

The LIS-500 image sensor is a high performance, ultra low power, low cost near IR sensor, designed to meet the demanding needs for small cost effective decoding, optical touch screen, position detection and feedback, OCR, and other applications.

All that is needed to achieve video is a single low voltage power supply, a clock, and up to three control signals.

The LIS-500 sensor consists of a row of 514 pixel including 500 for optical pixels, 13 for reference dark pixels, and 1 dummy pixel. The Pixel size is 7.8x62.5um. The whole imaging Active area is 62.5um x 3900um.

The optical black signal can be clamping by reference of internal optical black pixels or by external reference voltage input.

The sensor has on chip Fixed Pattern Noise (FPN) cancellation.

## ◆◆◆ Applications

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

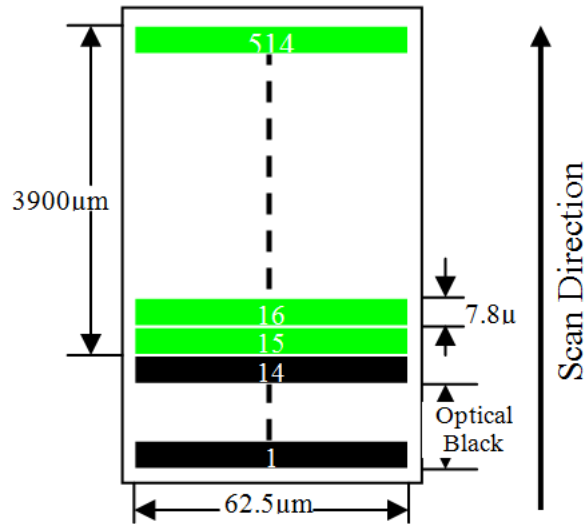


Figure 1: Pixel Array Configuration & Orientation

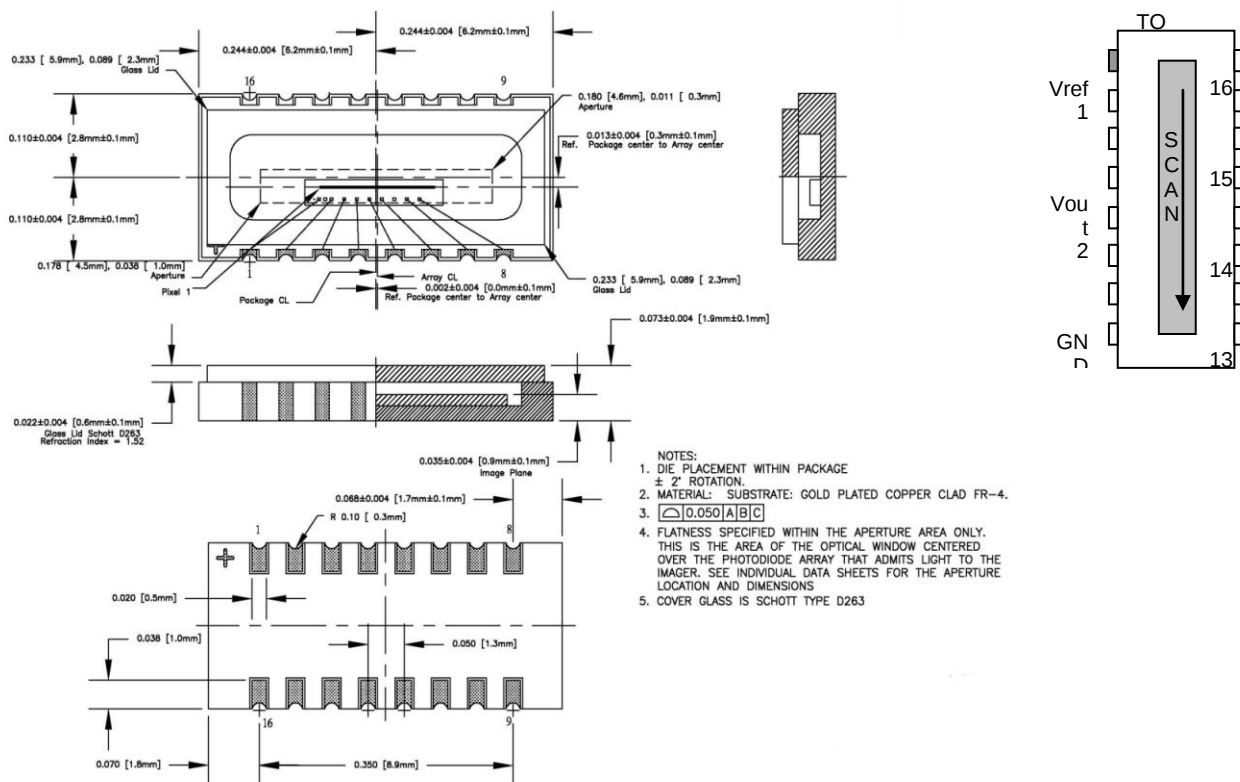


Figure 2: 16-pin LCC Package, P/N LIS-500A-LG

(\*other packages available, contact with Dynamax Imaging for details)

(\*the device is also offered as Known Good Die (KGD) on wafer)

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