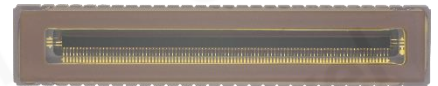


# GL1402 Product Flyer



## 2K line scan sensor for color sorting

**GL1402** is a 2K, high-performance linear array CMOS image sensor. The sensor uses a pixel size of  $14\ \mu\text{m}$  and has the characteristics of high sensitivity and high line frequency. **GL1402** provides users with black and white and color versions, which are suitable for the detection of black and white and color objects respectively. The black and white version supports single-line and three-line modes, and the color version supports three-line modes. Each line is spaced at  $14\ \mu\text{m}$  to minimize color crosstalk. **GL1402** uses a 12-bit ADC and transmits data through 4 pairs of Sub-LVDS interfaces, with a maximum data rate of 2.08 Gbps, a maximum line frequency of 81 kHz in single-wire mode, and a maximum line frequency of 27 kHz in three-wire mode. The exposure time of each row of pixels can be independently controlled to obtain better imaging effects. **GL1402** consumes less than 420 mW at the highest line frequency and is packaged in a 54-pins CLCC with a package size of  $38 \times 7.4\ \text{mm}$ .



### Key Features

- Mono : 2048(H) x 1(V), 2048(H) x 3(V)
- Color : 2048(H) x 3(V)
- Individual exposure control for each row of pixel
- External trigger
- Cost efficient

### Applications

- Industrial Inspection
- Color and Food Sorting
- PV Industry
- OCT

## Sensor Specifications

Resolution	2048(H) x 4(V)	Optical format	28.896 mm/ 1.806 inches
Pixel size	14 $\mu\text{m}$ $\times$ 14 $\mu\text{m}$	Peak QE	69.3% @560nm
Shutter type	Global	Maximum frame rate	81 kHz @ single line
Full well capacity	140 ke <sup>-</sup>	Output channel	4xSub-LVDS
Temporal noise	11 e <sup>-</sup>	Channel multiplexing	4/2/1
Dynamic Range	70 dB	Power consumption	<0.65 W
ADC bit depth	12 bit	Package	54-pins CLCC
Chroma	Mono & Color	Supply voltages	3.6V (analog) 1.5V (digital) 1.8V-3.3V (IO)

## Ordering Information

### Sensor Part No.

#### GL1402-BVC-TCN-AUD

Color, without microlens, ceramic 54-pin CLCC, sealed D263<sup>®</sup> T glass without AR coating

#### GL1402-BVM-TCN-AUD

Monochrome, without microlens, ceramic 54-pin CLCC, sealed D263<sup>®</sup> T glass without AR coating

#### GL1402-BVM-SCN-AUD

Monochrome, without microlens, ceramic 54-pin CLCC, sealed D263<sup>®</sup> T glass without AR coating

## Contact Gpixel HQ

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