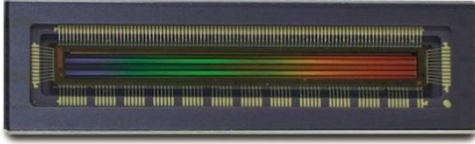


## 4096 x 2 High Speed Linear CMOS Image Sensor



### Applications

- Machine Vision
- Railway Inspection
- Optical Coherence Tomography
- Logistic

### SENSOR DESCRIPTION

GL0402 is a line scan sensor with 4096 x 2 resolution and 7 $\mu$ m x 7 $\mu$ m pixel size, available in both mono and Bayer color versions.

To meet the demands of the high speed industrial market, the GL0402 provides line rates up to 200kHz using single-line output and 100kHz using dual-line output. The sensor integrates an internal sequencer to facilitate easy the camera development in terms of both control signals and hardware design. Additional functions such as internal/external triggering and channel multiplexing make the GL0402 flexible and versatile.

Assembled in a CLCC 76-pin ceramic package, the GL0402 enables compact camera size and efficient mass production.

### SENSOR SPECIFICATIONS

Resolution	4096 × 2	Shutter type	Global shutter
Pixel size	7 $\mu$ m × 7 $\mu$ m	Photosensitive length	28.672mm
Peak. QE	75% @ 570nm	Data rate	10.944Gbps
Output channel	12 x sub-LVDS	Chroma	Mono & Color
Power consumption	2.2W	Package	76-pin CLCC

Operation mode	Single-line mode	Dual-line mode
Line rate	200kHz	100kHz
Readout noise	13e <sup>-</sup> @LG, 6.8e <sup>-</sup> @HG	22.5e <sup>-</sup> @LG, 5.2e <sup>-</sup> @HG
FWC	27.5ke <sup>-</sup> @LG, 10ke <sup>-</sup> @LG,	25ke <sup>-</sup> @LG, 9.2ke <sup>-</sup> @LG
Dynamic range	66.5dB@LG, 65.6dB@LG	60.7dB@LG, 62.6dB@LG

### PACKAGE OUTLINE

