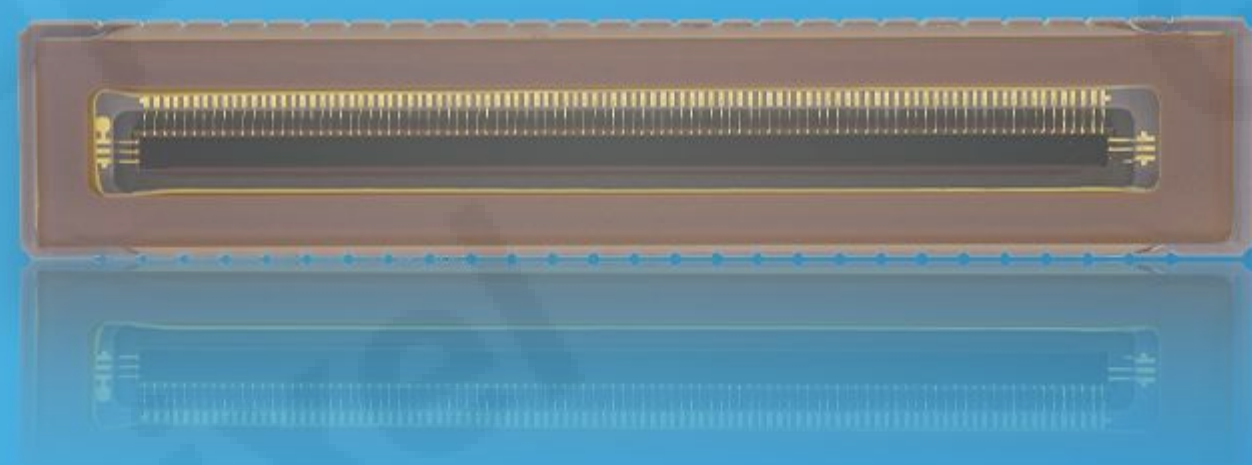
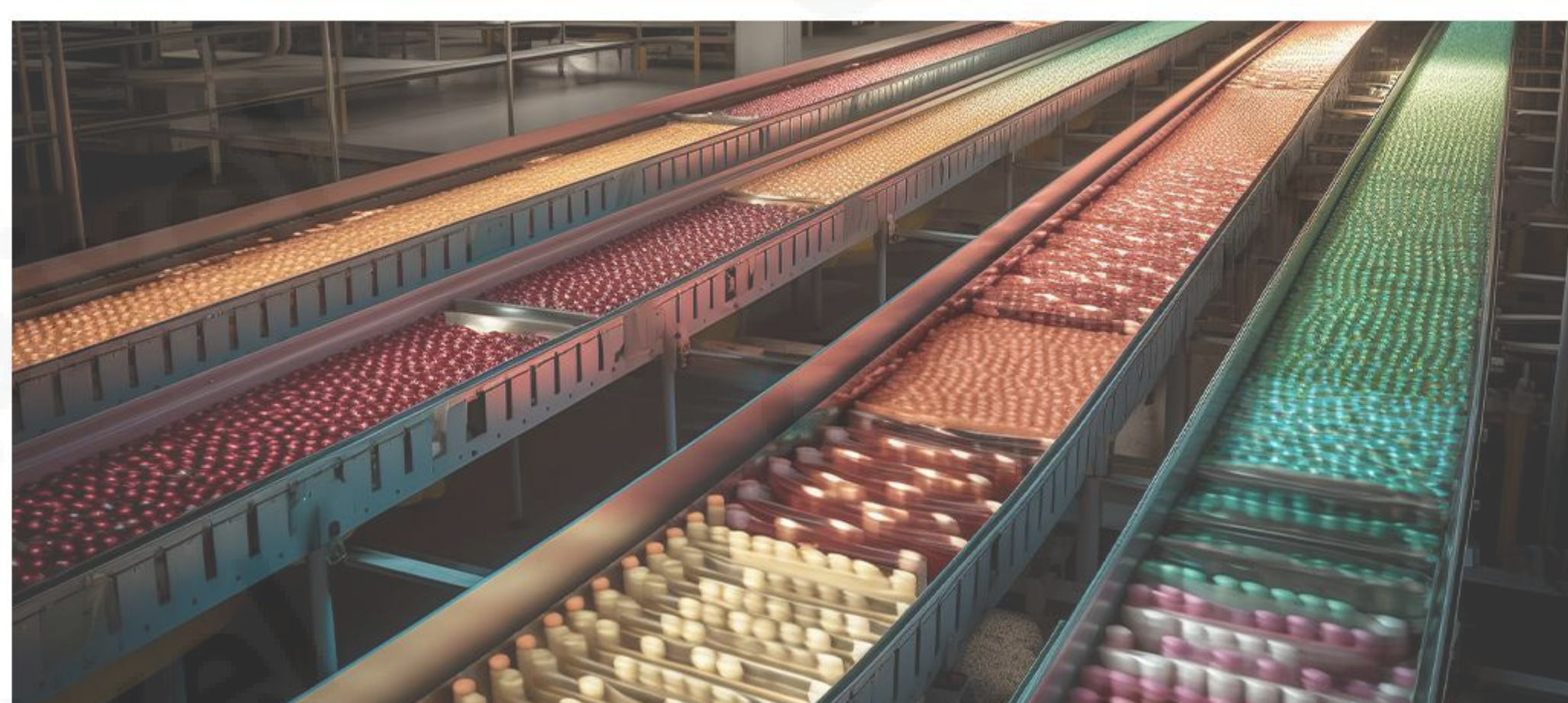




GL1402

2K 14 μm RESOLUTION GLOBAL SHUTTER LINE SCAN CMOS IMAGE SENSOR

GL1402 is a 2K, high-performance linear array CMOS image sensor. The sensor uses a pixel size of 14 μm 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 μm 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 x 7.4 mm.



Key Features and Benefits

- ▶ Cost Efficient
- ▶ High Frame Rate
- ▶ High Dynamic Range
- ▶ Low Power Consumption

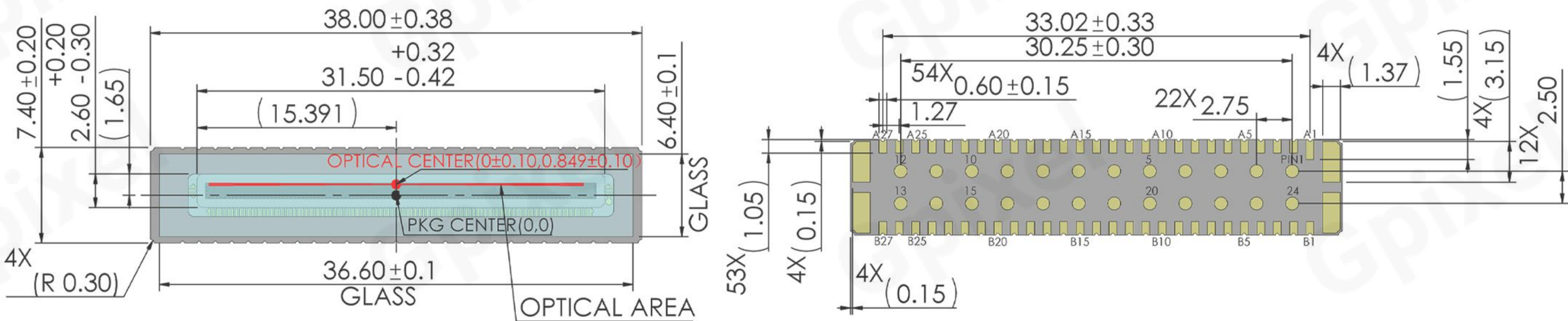
Applications

- ▶ Automation & Inspection
- ▶ Tomography (OCT)

Specifications

Nr of Active Pixels	2048 (H) x 1 (V) 2048 (H) x 3 (V)	Optical Format	28.896 mm
Pixel Size	14 μm x 14 μm	Shutter Type	Global Shutter
Peak QE	69.3% (560 nm)	Temporal Noise	9.1 e ⁻
Full Well Capacity	28.7 ke ⁻	Angular Response	20° (85% Response)
Dynamic Range	69.9 dB	Max Line Rate	81 kHz (single line)
Output Format	4 ch Sub-LVDS	Channel Multiplexing	4/2/1
ADC	12 bit	Max. Data Rate	2.08 Gbps
Chroma	Mono, RGB color	Power Consumption	< 0.42 W
Supply Voltage	3.6 V (analog) 1.8 V - 3.3 V (IO) 1.5 V (digital)	Package	54 pins CLCC (38.0 mm x 7.4 mm)

Package Drawing



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