

GL7004

4K 7 μm RESOLUTION GLOBAL SHUTTER LINE SCAN CMOS IMAGE SENSOR

GL7004 is a 4096 (H) x 4 (V) resolution global shutter linear array CMOS image sensor, featuring 7 μm high-sensitivity pixels. Offered in two basic flavors: a multi color 4 row R+G+B+Mono and 4 row mono variants, the sensor allows each row to have a unique exposure time, with line rates up to 250 kHz in single line mode and 76.9 kHz in quad line mode. The sensor's high line rate is a perfect fit for high-throughput various industrial inspection applications including sorting various inspection applications like solar panel, printing and railway monitoring at a cost-effective price offering.

The **GL7004** is available in a compact LCC ceramic package, requiring only 3 external power supplies and consuming only 1.05 W, making it easier for customers to design and integrate their systems.



Key Features and Benefits

- ▶ Individual Exposure Control for Each Color Line
- ▶ External Trigger
- ▶ High Frame Rate
- ▶ Low Power Consumption
- ▶ Cost Efficient

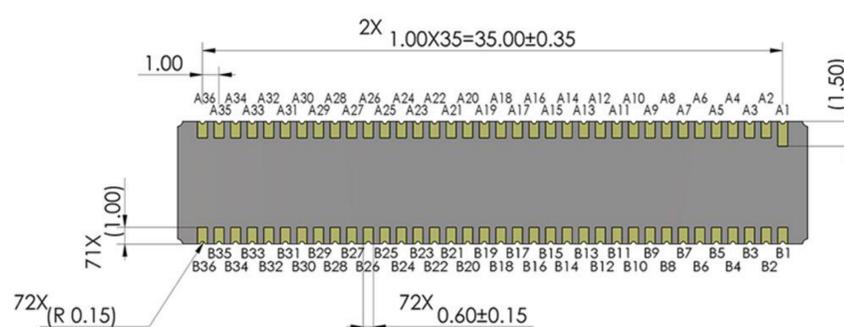
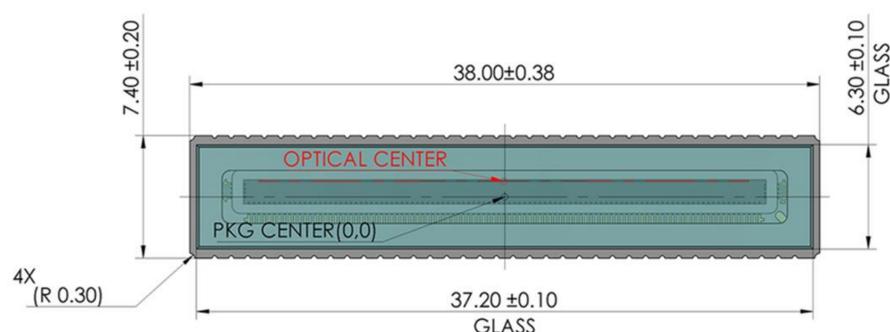
Applications

- ▶ Automation & Inspection
- ▶ Logistic & Positioning

Specifications

Nr of Active Pixels	4096 (H) x 4 (V)	Optical Format	1.8"
Pixel Size	7 μm x 7 μm	Shutter Type	Global Shutter
Peak QE	74.5% (560 nm)	Temporal Noise	4.3 e ⁻ (10 bit, analog gain 4x)
Full Well Capacity	10.5 ke ⁻ (10 bit, analog gain 1x)	Dynamic Range	61.5 dB
Max Line Rate	250 kHz (single-line)	Output Format	12 ch Sub-LVDS
ADC	10 bit	Max. Data Rate	14.4 Gbps
Chroma	Mono, RGB color	Power Consumption	1.05 W
Supply Voltage	3.6 V (analog) 1.5 V (digital) 1.8 V - 3.3 V (IO)	Package	72 pins CLCC (38.0 mmx7.4 mm)

Package Drawing



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