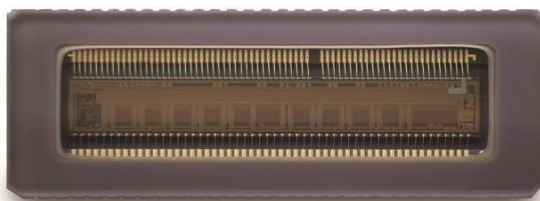# 2K/4K C-mount Line Scan CMOS Image Sensor

Preliminary and Confidential

Applications

- ➢ **Industrial Inspection**
- ➢ **Logistics barcode scanning**
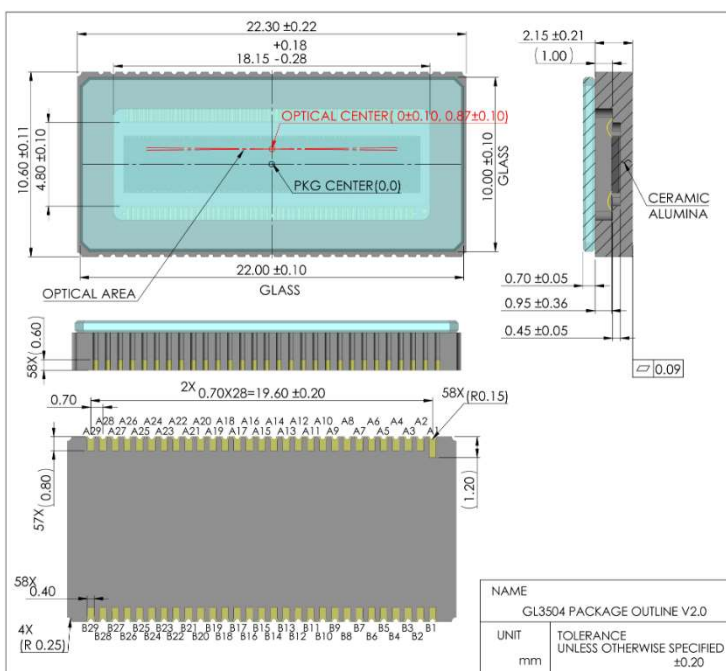- ➢ **Printing Inspection**
- ➢ **Railway Inspection**

SENSOR DESCRIPTION

GL3504 is a global shutter line scan image sensor consisting of two sets of pixel arrays, one is two lines with 3.5 µm pixels, and the other is four lines with 7 µm pixels. Multiple modes are supported including single/dual lines of 3.5 µm, and single/ dual/four lines of 7 µm. It reaches a maximum line rate of 172 kHz with 7 µm line in 12 bit single line mode, or up to a maximum line rate of 84 kHz with 3.5 µm line in 12bit single line mode.

GL3504 provides a cost-effective camera solution for inspection applications such as industrial and logistics barcode scanning. Color version sensor offered with Bayer CFA for the two 3.5 µm pixel lines, RGBW true color CFA for the four 7 µm pixel lines. Moreover, output channel multiplexing provides more flexibility for users.

GL3504 is assembled with a 58 pin CLCC ceramic package for fast heat dissipation and high robustness.

PACKAGE OUTLINE

SENSOR SPECIFICATIONS

Resolution	4096 (H) × 1(V)	4096 (H) × 2(V)	2048 (H) × 1(V)	2048 (H) × 2(V)	2048 (H) × 4(V)	2048 (H) × 4(V)
Pixel size	3.5 µm × 3.5 µm	3.5 µm × 3.5 µm	7 µm × 7 µm	7 µm × 7 µm	7 µm × 7 µm	7 µm × 7 µm
ADC	12 bit	12 bit	12 bit	12 bit	12 bit	8 bit
Full well capacity	12.5 ke-	12.5 ke-	11.5 ke-	10.0ke-	10.2ke-	10.0ke-
Temporal noise	5.5 e-	5.5 e-	5.5 e-	5.1e-	5.2e-	18.1e-
Dynamic range	67.5 dB	67.5 dB	66.5 dB	66dB	65.8dB	54.9dB
Max. frame rate	84 kHz	42 kHz	172 kHz	88.4kHZ	44.7kHZ	62.9kHZ
Power consumption	< 0.9 W				<1.0W	<0.7W
Interface	Sub LVDS					
Max. Data rate	5.47 Gbps					
Channel multiplexing	6/3/2/1					
Package	58pin CLCC ceramic package					
Chroma	Mono & Color					

Subject to change without notice. Please address all product inquiries to GPIXEL
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