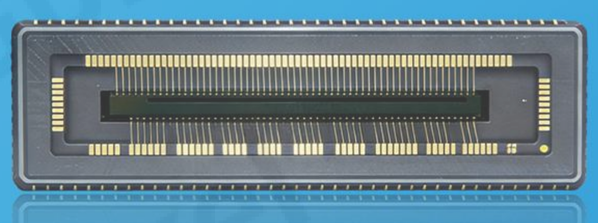
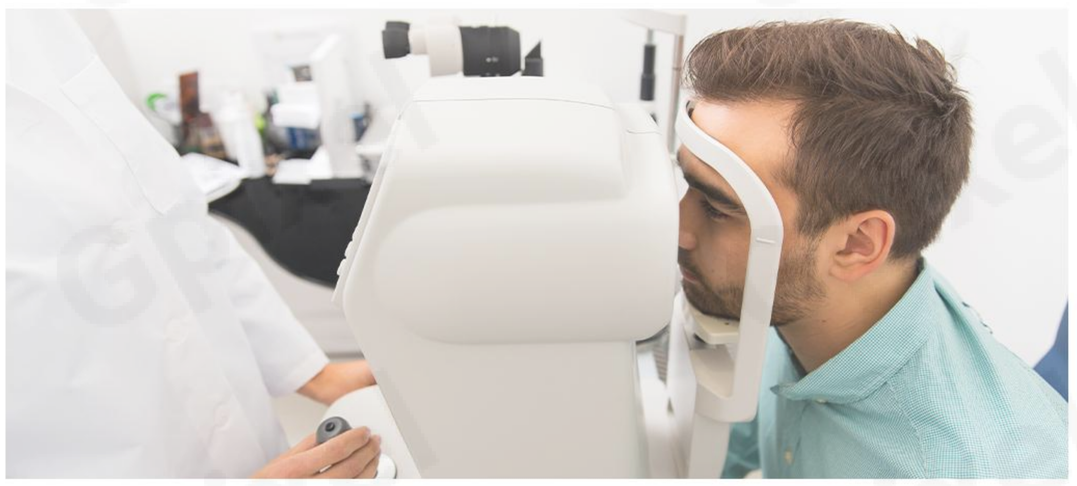


GLR1002BSI-S

2K 10 μm x 200 μm PIXEL SIZE
HIGH SPEED BSI LINE SCAN CMOS IMAGE SENSOR

The **GLR1002BSI-S** is a next generation 2K back side illuminated (BSI) CMOS line scan sensor designed to elevate performance in OCT and spectroscopy applications, combining high speed readout up to 250 kHz with a rectangular 10 × 200 μm pixel optimized for precise optical alignment. Its advanced BSI global shutter architecture delivers peak QE of 91% at 630 nm and 58% QE at 850 nm, a 164 ke^- full well capacity, low read noise, and true 12 /14 bit output, enabling wide dynamic range and high contrast fringe reconstruction. High line rates are supported through 1.2 GHz Sub LVDS outputs with <570 mW power consumption, providing an efficient balance of speed and system integration. Engineered for both high throughput imaging and demanding diagnostic workflows, the **GLR1002BSI-S** is housed in a robust ceramic CLCC package with a double sided AR coated glass lid and a compact 40 mm × 11 mm footprint, ensuring stable mechanical integration and excellent alignment in OCT optical paths.



Key Features and Benefits

- Pixel Size：10 μm x 200 μm
- Fast Line Rate：250 kHz
- High NIR QE
- 12 bit / 14 bit ADC

Applications

- Optical Coherence Tomography (OCT)
- Non-Destructive Industrial Inspection
- In-Vivo Medical Endoscopy
- Spectroscopy

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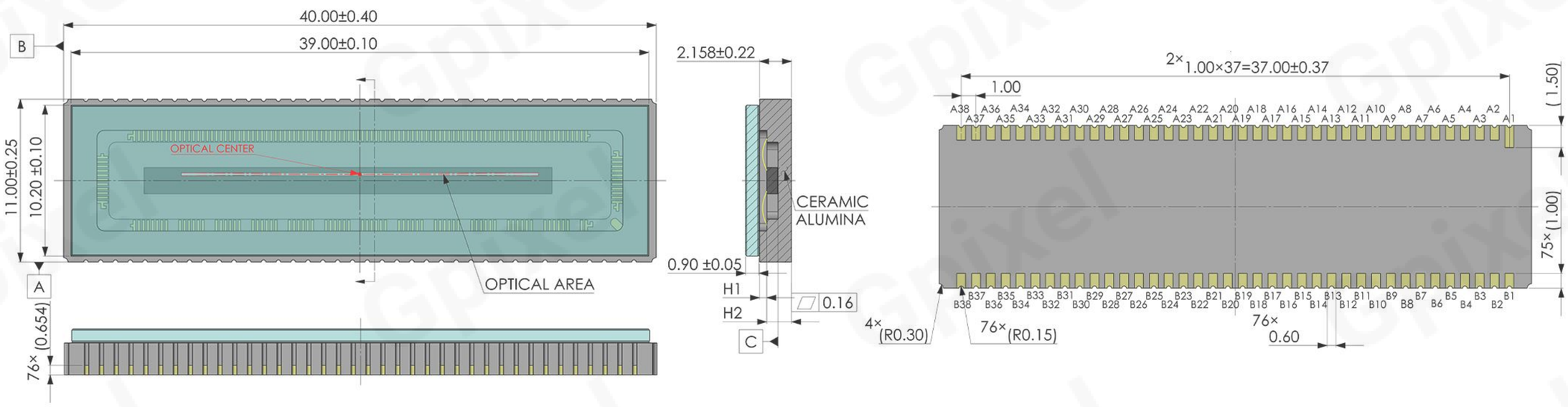
Specifications

Nr of Active Pixels	2411 (H) x 1 (V)	Optical Format	24.11 mm
Pixel Size	10 µm x 200 µm	Shutter Type	Global Shutter
Peak QE	91.2 % (630 nm) 58.0 % (850 nm)	Temporal Noise	30.8 e^- (12 bit) 20.1 e^- (14 bit)
Full Well Capacity	164.2 ke^-	Dynamic Range	74.5 dB (12 bit) 77.4 dB (14 bit)
Max Line Rate	250/130 kHz (12 bit) 100 kHz (14 bit)	Dark Current	T.B.D
Output Format	7x Sub-LVDS	Max. Data Rate	8.4 Gbps
Chroma	Mono	Power Consumption	< 570 mW
Supply Voltage	3.6 V for analog 1.5 V for digital 3.3 V for IO	Package	76 x lead CLCC (40 mm x 11 mm)

Package Drawing



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