

GLR1402BSI-M

2048 pixels, 14 μm x 350 μm RESOLUTION LINE SCAN CMOS IMAGE SENSOR

GLR1402BSI-M is a single-line linear sensor image sensor with rectangular pixels designed for spectroscopy, OCT, encoder and various other image reading applications.

GLR1402BSI-M has 2048 pixels in 1 row, with a pixel size of 14 μm x 350 μm , yielding an impressive max. 176 ke⁻ full well capacity and boasting a mere 3.1 e⁻ of noise.

Data is read out at 14 bits per pixel with 80 dB of dynamic range, or by combining two 12 bit pixel reads, high and low gain, to achieve a maximum dynamic range of 95.1 dB. GLR1402BSI-M supports both sLVDS and CMOS data outputs, customer can switch different data channels with 12 bit / 14 bit based on demand.



Key Features and Benefits

- ▶ Back Side Illuminated (BSI) Pixels
- ▶ High Sensitivity
- ▶ High Speed: up to 29 kHz
- ▶ Dual Gain HDR
- ▶ UV Version QE 70.4% (280 nm)
- ▶ 12/14 bit ADC

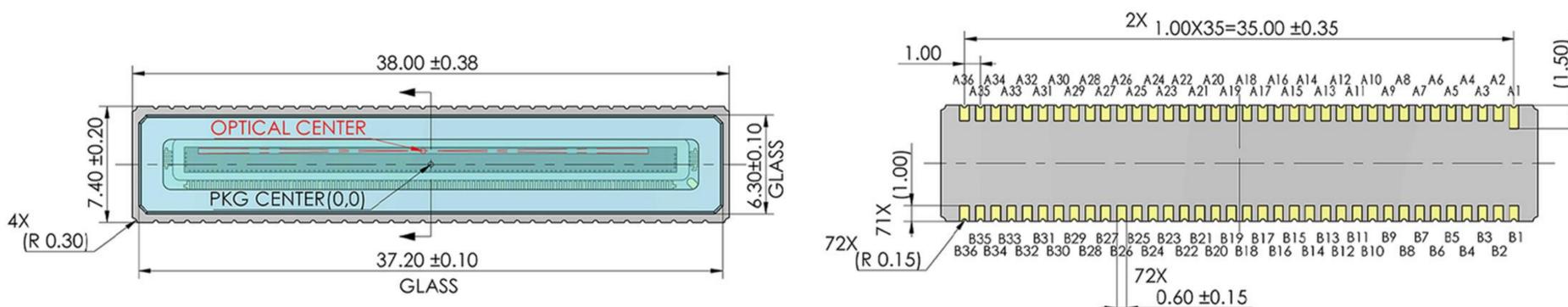
Applications

- ▶ Spectroscopy

Specifications

Nr of Active Pixels	2048 (H) x 1 (V)	Optical Format	28.672 mm
Pixel Size	14 μm x 350 μm	Shutter Type	Global Shutter
Peak QE	90.7% (420 nm)	Temporal Noise	3.1 e ⁻ (HDR HG) 44.7 e ⁻ (HDR LG)
Full Well Capacity	176 ke ⁻	Dark Current	3.8 ke ⁻ /s/pix
Dynamic Range	95.1 dB	Max Line Rate	29 kHz
Output Format	4 ch Sub-LVDS CMOS parallel output	Channel Multiplexing	Sub-LVDS 4/2/1
ADC	12/14 bit	Max. Data Rate	2.4 Gbps (Sub-LVDS) 600 M (CMOS)
Chroma	Mono	Power Consumption	< 350 mW
Supply Voltage	3.6 V (Analog) 1.5 V (Digital) 1.8 - 3.3 V (IO)	Package	CLCC 72 pins with quartz glass lid (38.0 mm x 7.4 mm)

Package Drawing



Contact Gpixel

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