GLR1205BSI-S Product Flyer

SINGLE LINE 512 RESOLUTION GLOBAL SHUTTER LINE SCAN CMOS IMAGE SENSOR WITH 12.5 µm x 250 µm RECTANGULAR PIXELS

GLR1205BSI-S is a single-line linear image sensor with rectangular pixels and analog output designed for use in displacement sensors.

The sensor's 512 pixels are each 12.5 µm (H) x 250 µm (V) and provide a full well capacity of 2.8 million electrons and a maximum signal-to-noise ratio of 71.1 dB. The large pixel also increases the photosensitive area and facilitates easy alignment of the laser spot. Backside thinning technology enables a peak quantum efficiency of 95%, and almost 50% at 650 nm. A charge transfer time of only 2.5 µs ensures excellent lag performance. The single analog output allows image processing using an MCU module, and the small CSP package enables the design of a compact displacement sensor.

The GLR1205BSI-S image sensor is designed for the accurate detection of surfaces and precise distance measurement under a variety of lighting conditions.

Key Feature

- BSI linear sensor
- High sensitivity
- Rectangular pixel
- Large FWC
- CSP package

Applications

- Logistics & Positioning
- Automation & Inspection

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Sensor Specifications

Resolution	512(H) x 1(V)	Optical format	0.4"
Pixel size	12.5 µm x 250 µm	Photo-sensitive area	6.4 mm x 0.25 mm
Shutter Type	Global Shutter	Quantum efficiency	95%
Saturation Output Voltage	2.1 V	Temporal noise	0.58 mV rms
Dark Current	TBD	Dynamic range	3620:1
Max. Line rate	9.43 kHz	Output format	Analog output
Data rate	5 MHz	Channel multiplexing	NA
Chroma	Mono	Power consumption	0.09 W
I/O voltage	3.3 V	Package	17-pin CSP (7.39 mm x 1.15 mm)

Ordering Information

Sensor Part	Description	Grade
GLR1205BSI-BBM-NQN-GBE	Mono, No Microlens, 17-pin CSP Package, Non-Anti-Reflective Coating Sealed D263® T eco glass	ES

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