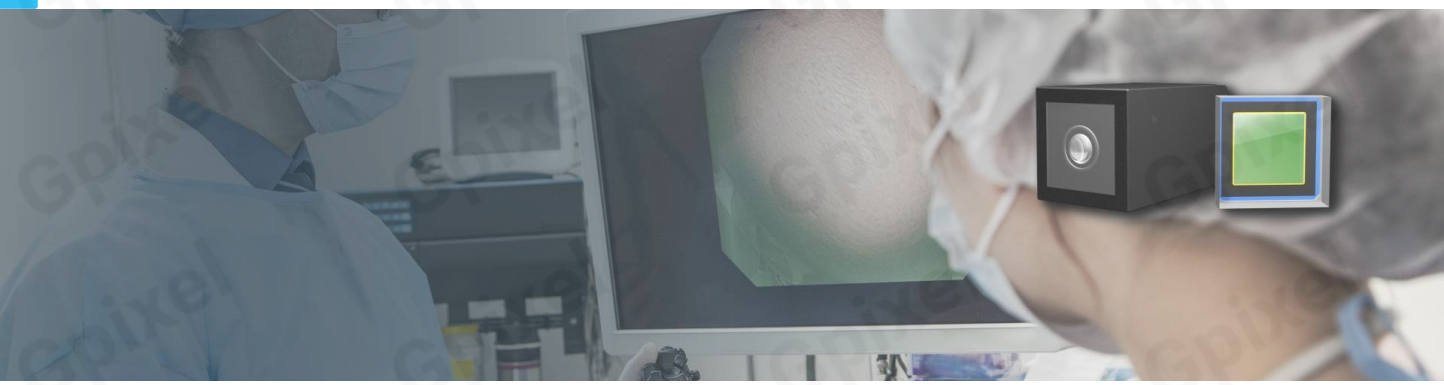
GXS1508/GXSM1508 Product Flyer

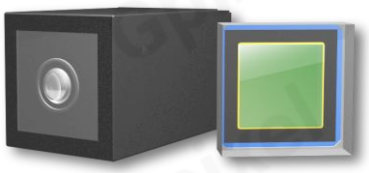


1 x 1 mm^2 CMOS IMAGE SENSOR (MODULE)

GXS1508 is an ultra-small sensor designed in a 4-pin CSP configuration, with a resolution of 400 x 400 and a a 1.5 µm BSI rolling shutter pixel. It delivers an analog signal output at a frame rate of 30 fps and is compatible with industry standard image signal processors (ISPs). The sensor's outer dimensions are 0.961 x 0.961 x 0.55 mm.

The **GXSM1508** module combines the **GXS1508** with a wafer-level optical lens, with dimensions of 1.04 x 1.04 x 2.082 mm. The Wafer-Level Optical Lenses (WLOs) employ a three-element lens design with an F# aperture of 5.0, which effectively optimizes light transmission, image clarity and field and depth of view offering a diagonal field of view of 120°, ensuring adequate visibility in confined areas.

Both the **GXS1508** and **GXSM1508** are ideal for various applications, such as reuseable and single-use endoscopes for medical imaging, position sensing, smart devices, and toys.



Key Features

- Compact CSP Package
- High sensitivity BSI Image Sensor
- Integrated WLO lens

Applications

- Medical endoscopy
- Wearables devices
- Toys
- Smart homes appliances

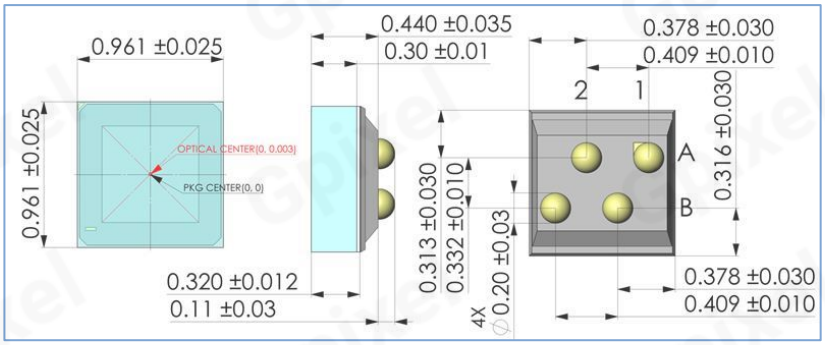
Sensor Specifications

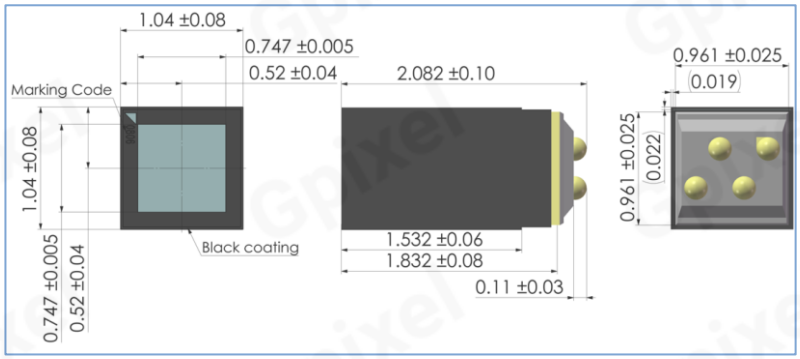
Resolution	400 (H) x 400 (V)	Optical format	1/19"
Pixel size	1.5 μm x 1.5 μm	Photo-sensitive area	0.6 mm x 0.6 mm
Shutter type	Rolling shutter	Peak QE	TBC
Full well capacity	5 ke^-	Temporal noise	7.2 e^-
Dynamic range	57 dB	Max. Frame rate	30 fps
Output interface	Analog output	CRA	28°
Chroma	Color	Power consumption	17 mW
Supply voltage	3.3 V	Package	4 pins CSP (0.961 mm x 0.961 mm x 0.55mm)

Module

Field of view	Horizontal FOV 83° Diagonal FOV 120°	Aperture F#	5
focal length	0.417mm	Lens configuration	3 element
TV Distortion	<16% @ 90% field	Focus range	Fixed focus 4-50 mm
IR filter	665 nm ± 10nm	Module Package Size	1.04 x 1.04 x 2.082 mm

Mechanical Drawings





Gpixel Microelectronics Inc
Building #5, Optoelectronic Information Industrial Park, #7691 Ziyou Road, Changchun, Jilin, China.
Tel: +86-0431-85077785
info@gpixel.com
www.gpixel.com