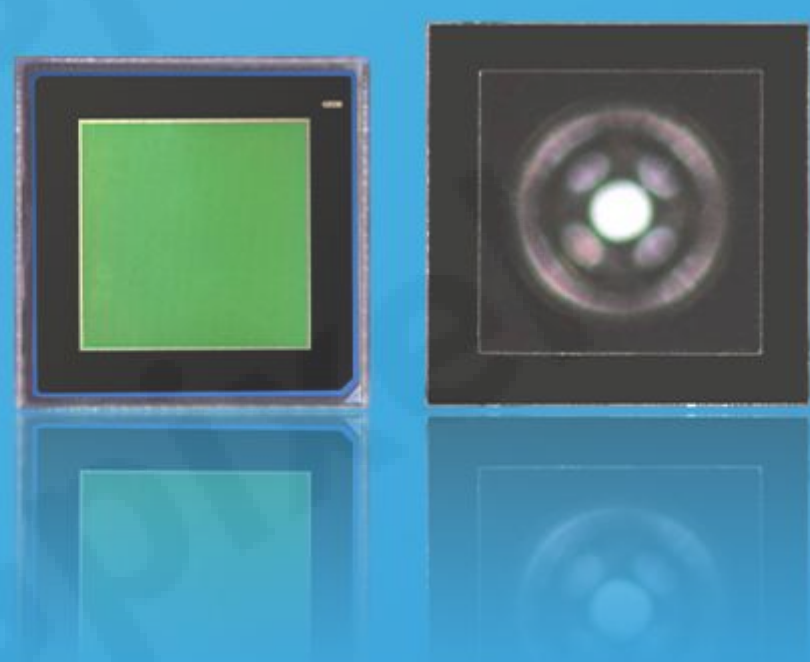




GXS1508/GXSM1508

1.5 μm 0.16 MP ROLLING SHUTTER CMOS IMAGE SENSOR

GXS1508 is an ultra-small sensor designed in a 4 pins CSP configuration, with a resolution of 400 x 400 and 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 reusable and single-use endoscopes for medical imaging, position sensing, smart devices, and toys.



Key Features and Benefits

- ▶ WLO
- ▶ High Sensitivity
- ▶ Compact CSP Packaging

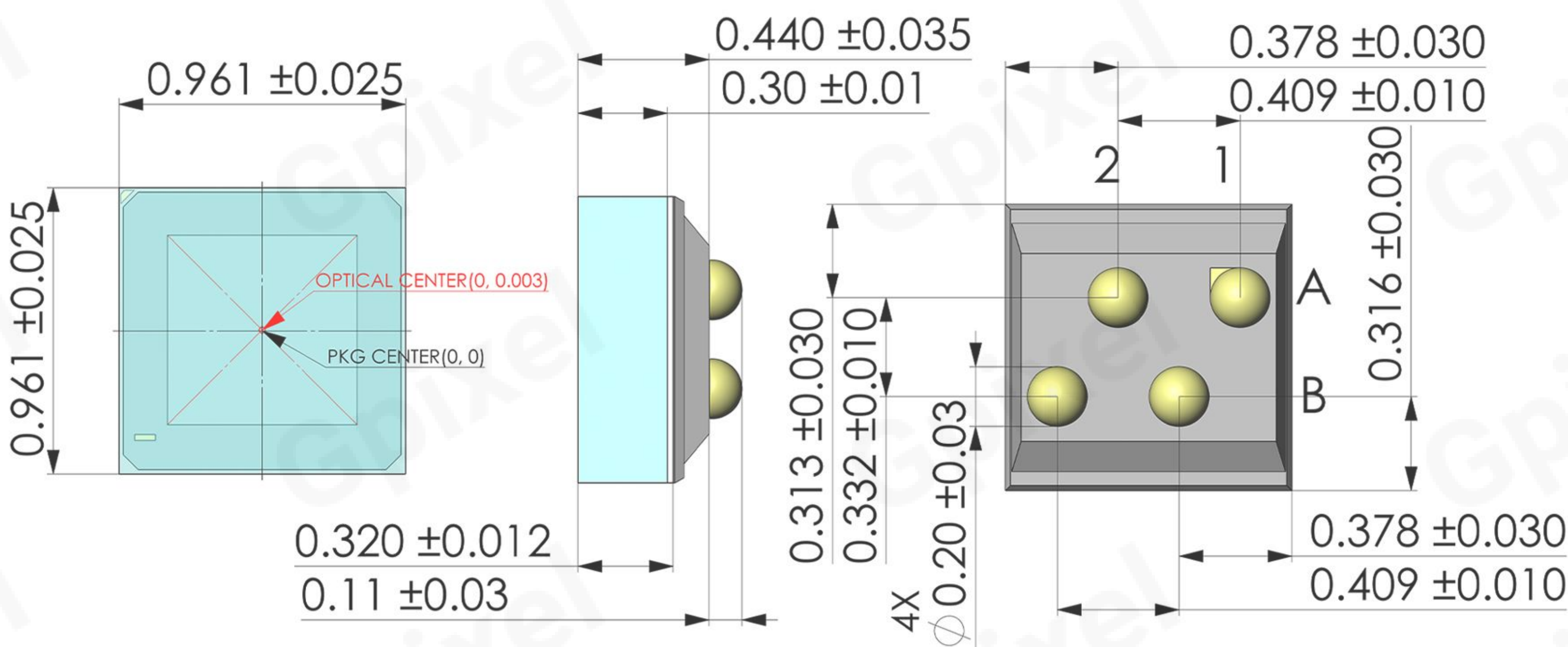
Applications

- ▶ Microscopy

Specifications

Nr of Active Pixels	400 (H) x 400 (V)	Optical Format	1/19"
Pixel Size	1.5 μm x 1.5 μm	Photosensitive Area	0.6 mm x 0.6 mm
Shutter Type	Rolling Shutter	Peak QE	54.7% (515 nm)
Full Well Capacity	4 ke ⁻	Temporal Noise	6.1 e ⁻
Dynamic Range	54.9 dB	Max Frame Rate	30 fps
Output Format	Analog	Angular Response	28° $\pm$ 3°
Dark Current	98 e ⁻ /pixel/s (60°C)	DSNU	5.4 mV
Chroma	RGB Color	Power Consumption	17 mW
Supply Voltage	3.3 V	Package	4 pins CSP (0.961 mm x 0.961 mm x 0.55 mm)
WLO Specification			
Field of View (FOV)	Horizontal 83° Diagonal 120°	F Number	5.0
Focal Length	0.417 mm	Optical Layout	3-surface lens
TV Distortion	< 16% (90% field)	Focus	Fixed Focus 4-50 mm
IR Filter	665 nm $\pm$ 10 nm		

Package Drawing



Contact Gpixel

GPPIXEL CHINA CHANGCHUN (HQ)

Building 5, Optoelectronic Information
Industrial Park, 7691 Ziyou Road,
130033 Changchun, Jilin, China
Phone: +86-431-85077785

Disclaimer: The product information and pictures in this flyer are for reference only. For the latest information please visit www.gpixel.com.
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GPPIXEL EUROPE

Gpixel NV
Copernicuslaan 60, 2018
Antwerpen, Belgium
Phone: +32-33034442

GPPIXEL JAPAN

Gpixel Japan Co., Ltd.
TOC Osaki Building 18th Floor, 1-6-1 Osaki,
Shinagawa-ku, Tokyo, 141-0032 Japan
Phone: +81-03-5962-1600

