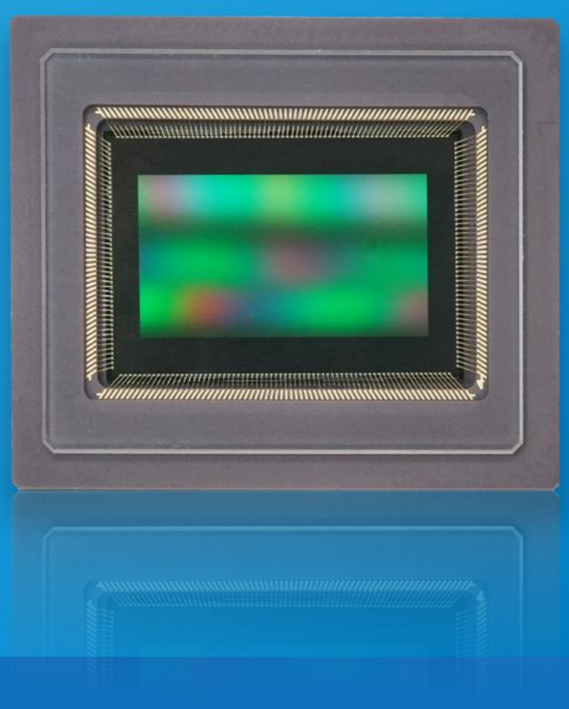
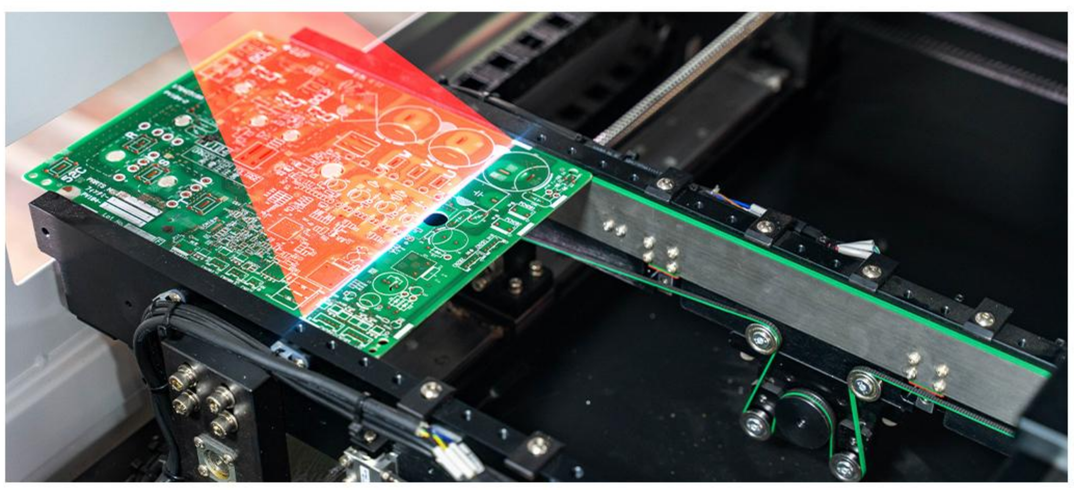


GSPRINT6502BSI

6.5 µm 2 MP GLOBAL SHUTTER CMOS IMAGE SENSOR

GSPRINT6502BSI is a backside illuminated global shutter CMOS image sensor with 2048 (H) x 1152 (V) pixels, each 6.5 µm square, providing a wide format and compatibility with 1" optics. The combination of backside illumination and a large 6.5 µm pixel maximize light collection in high-speed imaging applications including 3D laser profiling and scientific imaging. With 10 bit output and 32 pairs of Sub-LVDS outputs each operating at 1.2 Gbps, the **GSPRINT6502BSI** achieves 1498 frames per second. Up to 8 vertically oriented regions of interest can be defined to operate the sensor at increased frame rates. For applications in which the maximum frame rate is not required, multiplexing modes are available to reduce the number out output channels by any multiple of 2.



Key Features and Benefits

- BSI
- Multi-Slope HDR
- High Frame Rate
- Broad AR

Applications

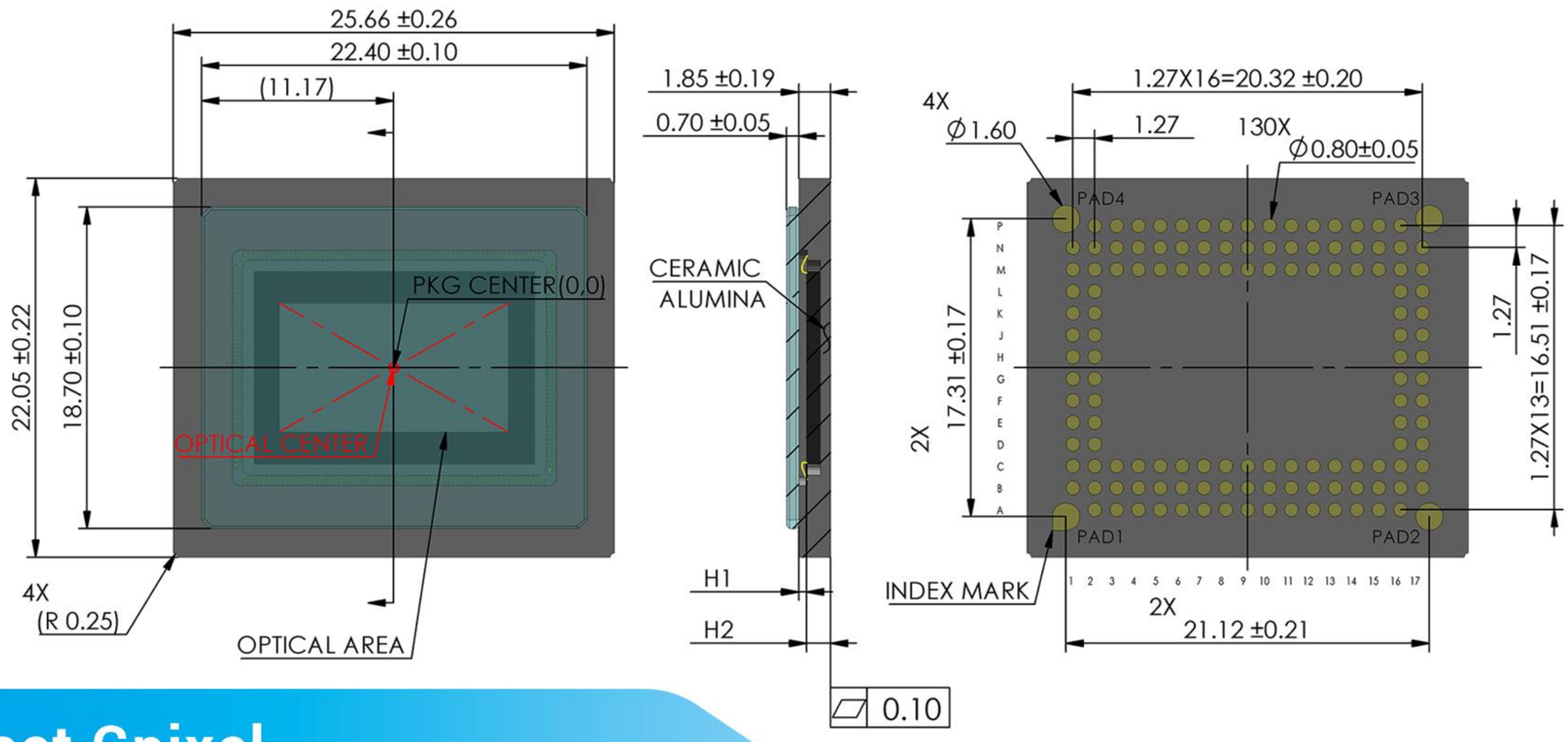
- Automation & Inspection
- Spectroscopy
- Life Sciences
- Microscopy
- High Speed Imaging

info@gpixel.com www.gpixel.com

Specifications

Nr of Active Pixels	2048 (H) x 1152 (V)	Optical Format	1"
Pixel Size	6.5 µm x 6.5 µm	Photosensitive Area	13.3 mm x 7.5 mm
Shutter Type	Global Shutter	Peak QE	86% (440 nm)
Full Well Capacity	10.1 ke^- (10 bit,PGA gain 1.0x)	PLS	< -80 dB
Temporal Noise	21.4 e^- (10 bit,PGA gain 1.0x)	Angular Response	35 ° (80% Response)
Dark Current	-	Max. SNR	40.0 dB
Dynamic Range	53.4 dB (10 bit,PGA gain 1.0x)	Max Frame Rate	1498 fps (10 bit) 2941 fps (10 bit,1x2 Binning)
Output Format	32 pairs of Sub-LVDS	Channel Multiplexing	Yes (any multiple of 2)
ADC	10 bit	Max. Data Rate	38.4 Gbps
Chroma	Mono	Power Consumption	1.5 W
Supply Voltage	3.6 V & 3.3 V (analog) 1.8 V & 3.3 V (I/O) 1.5 V (digital)	Package	130 pins LGA (25.66 mm x 22.05 mm)

Package Drawing



Contact Gpixel

GPIXEL CHINA CHANGCHUN (HQ)

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

GPIXEL EUROPE

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

GPIXEL 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

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