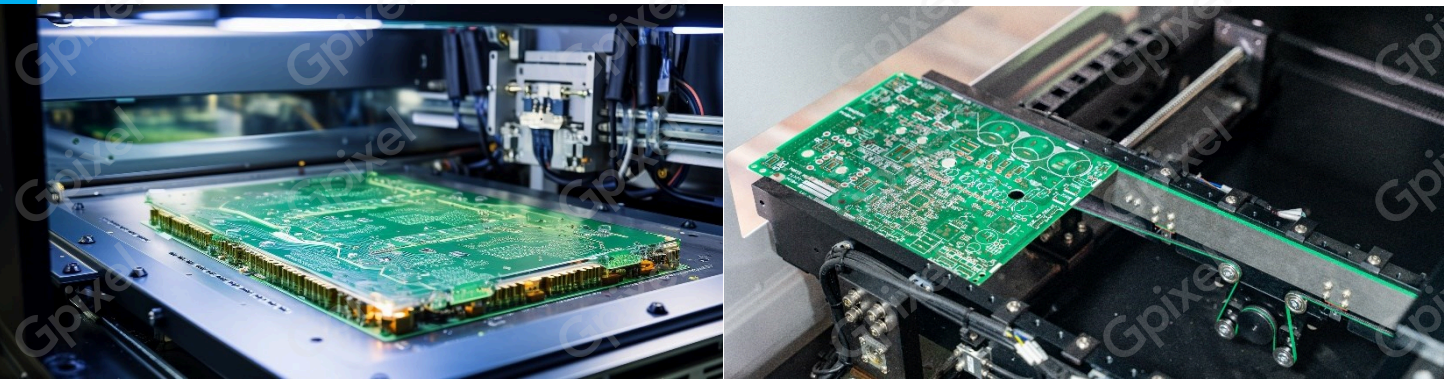


# GSPRINT6502BSI Product Flyer



## 2MP 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  $\mu\text{m}$  square, providing a wide format and compatibility with 1" optics. The combination of backside illumination and a large 6.5  $\mu\text{m}$  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 1500 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 Feature

- BSI
- Multi-slope HDR
- High Frame Rate
- High Speed
- High QE

### Applications

- Laser 3D Profile

## Sensor Specifications

Resolution	2048 (H) x 1152 (V)	Optical format	1"
Pixel size	6.5 $\mu\text{m}$ x 6.5 $\mu\text{m}$	Photo-sensitive area	13.3 mm x 7.5 mm
Shutter type	Global Shutter	Quantum efficiency	>80%
Full well capacity	20.0 ke <sup>-</sup> @10-bit, PGA gain x1.0	Temporal noise	24.3e <sup>-</sup> @ 10-bit, PGA gain x1.0
Dark Current	T.B.D.	Dynamic range	57 dB @ 10-bit, PGA gain x1.0
Max. Line rate	>1500 fps @ 10bit 2941 fps @ 10bit (1x2 binning)	Output format	32 pairs Sub-LVDS
Data rate	38.4 Gbps	Channel multiplexing	Yes(any multiple of 2)
Chroma	Mono	Power consumption	< 1.9 W
I/O voltage	3.6 V \3.3 V analog 1.8 V IO、 1.2 V digital	Package	130 pins LGA 25.66 mm x 22.05 mm

## Ordering Information

Sensor Part	Description	Grade
GSPRINT6502BSI-AVM-NLN-BRE	BSI image sensor Removable D 263 <sup>®</sup> T eco glass lid with AR coating on both sides.	ES

## Contact Gpixel HQ

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