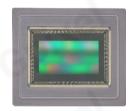
GSPRINT6502BSI Product Flyer





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 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 Feature

- BSI
- Multi-slope HDR
- High Speed
- Broad AR

Applications

- · Laser 3D Profile
- UV Imaging
- · Scientific High-Speed Imaging





Sensor Specifications

Resolution	2048 (H) x 1152 (V)	Optical format	1"
Pixel size	6.5 µm x 6.5 µm	Photo-sensitive area	13.3 mm x 7.5 mm
Shutter type	Global Shutter	Quantum efficiency	> 85%
Full well capacity	10.6 ke ⁻ @10-bit, gain x1.0	Temporal noise	21.3e ⁻
Dark Current (54.7°C die temperature)	691.0 e ⁻ /pixel/s	Dynamic range	53.9 dB
Max. frame rate	1498 fps @10bit normal 2941 fps @ 2x2 binning	Output format	32 pairs Sub-LVDS
Data rate	38.4 Gbps	Channel multiplexing	Yes(any multiple of 2)
Chroma	Mono	Power consumption	< 1.5 W
I/O voltage	3.6 V / 3.3 V analog 1.8/3.3V IO, 1.5 V digital	Package	130 pins LGA 25.66 mm x 22.05 mm

Ordering Information

Sensor Part	Description	Grade
GSPRINT6502BSI-ABM-NLN-BR1	Monochrome, without ulens, taped D263T glass with dual-ARC, 130 pin LGA, Normal speed	Grade 1
GSPRINT6502BSI-ABM-NLN-BRE	version, 732fps @ 10-bit 16 channels	ES
GSPRINT6502BSI-ABM-HLN-BR1	Monochrome, without ulens, taped D263T glass	Grade 1
GSPRINT6502BSI-ABM-HLN-BRE	with dual-ARC, 130 pin LGA, High speed version, 1498fps @ 10-bit 32 channels	ES
GSPRINT6502BSI-ABM-NLN-BU1	Monochrome, without ulens, sealed D263T glass	Grade 1
GSPRINT6502BSI-ABM-NLN-BUE	with dual-ARC, 130 pin LGA, Normal speed version,732fps @ 10-bit 16 channels	ES
GSPRINT6502BSI-ABM-HLN-BU1	Monochrome, without ulens, sealed D263T glass	Grade 1
GSPRINT6502BSI-ABM-HLN-BUE	dual- ARC, 130pin LGA, High speed version, 1498fps @ 10-bit 32 channels	ES

Contact Gpixel HQ

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