

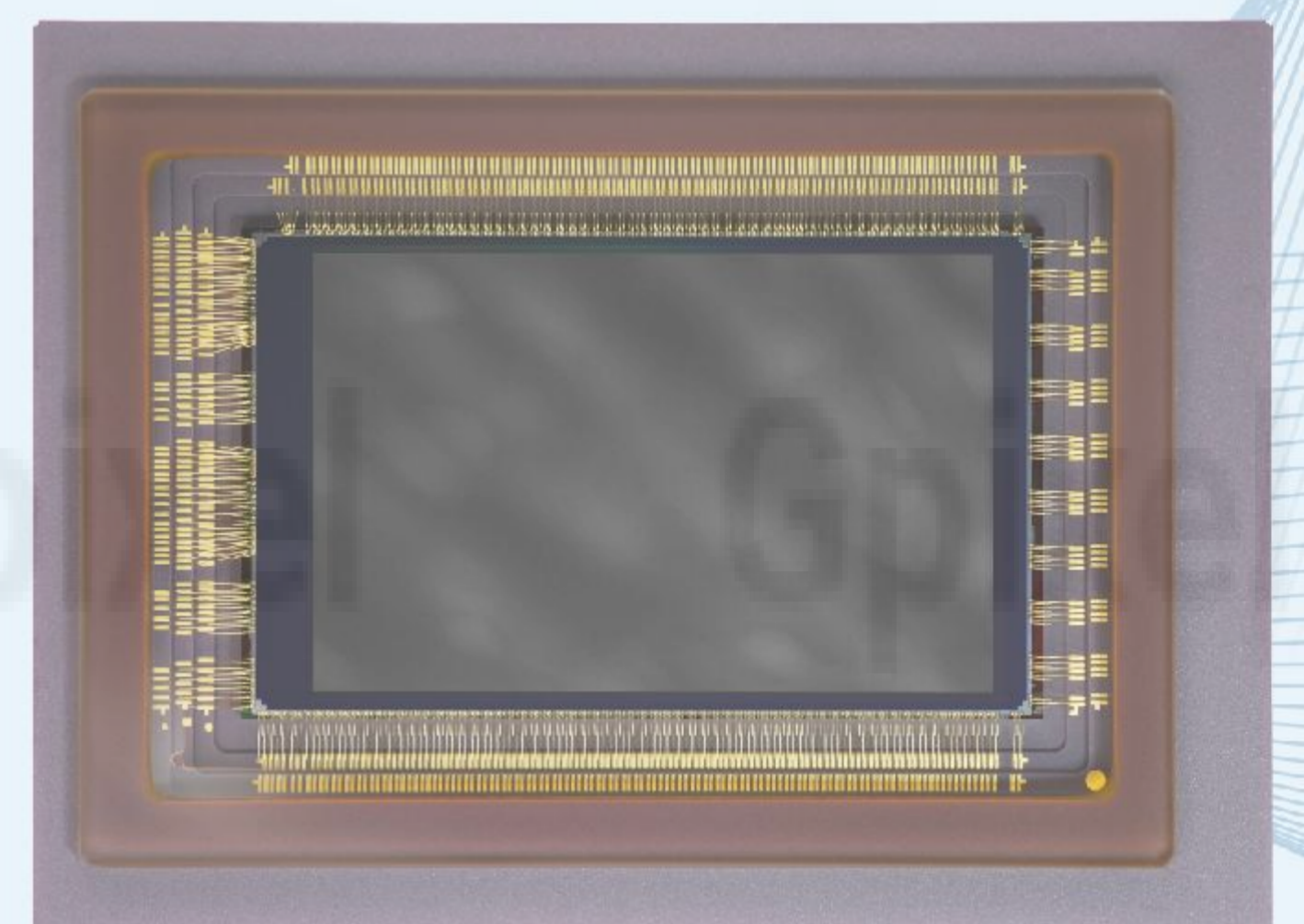
GSENSE3243BSI

43M Scientific BSI CMOS Image Sensor

GSENSE3243BSI is a backside illuminated (BSI) scientific CMOS image sensor, with 43MP resolution and 3.2 μm pixel size. The first Gpixel sensor with **GSENSE 2.0** technology, **GSENSE3243BSI** delivers numerous HDR modes, 4x seamless exposure summing, on-chip compression, and a blazing 100 fps at full resolution. Output is via a 5.25 GHz Gpixel Serial Interface, or industry-standard sLVDS.

Key features

- ✓ Stacked BSI Technology
- ✓ HDR Modes up to 100 dB
- ✓ Low Dark Current
- ✓ 4x Exposure Summing
- ✓ 100 fps @ Full Resolution
- ✓ On-Chip Compression



Specifications

Resolution	8192 (H) x 5232 (V)	Imaging area	26.2 x 16.25 mm (31.1 mm diag)
Pixel	3.2 μm x 3.2 μm, Rolling Shutter, BSI	Peak QE	80%
Dark Current	< 1.0 e ⁻ / pixel / second @ 0°C	Modes	Dual Gain, Piecewise Linear HDR, 2 or 4x Exposure Summing, 16 bit Compression
Readout noise	3.3 e ⁻ @ 14bit STD 4.4 e ⁻ @ 14bit HDR	Frame rate	gsi: 100 fps @ 14bit, 50 fps @ 14bit HDR sLVDS: 50 fps @ 14bit, 25 fps @ 14bit HDR
Full well capacity	24.0 ke ⁻ 96.0 ke ⁻ x4 exp	Dynamic range	74.7 dB @ 14bit HDR 80.8 dB @ 14bit HDR x4
Chroma	Mono with μlens	Package	48 x 35.5 mm 455pin LGA optional removable glass lid

Package Outline

