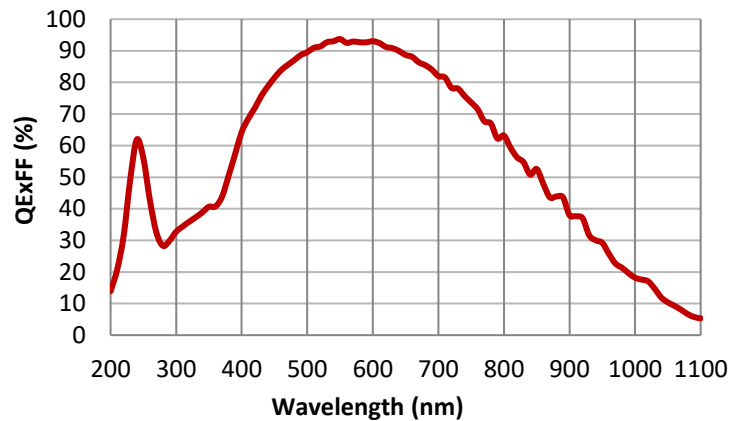
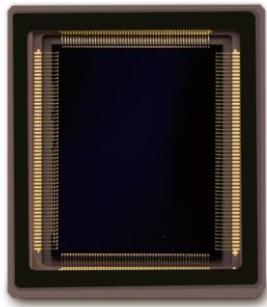


Backside Illuminated sCMOS Image Sensor – GSENSE2020BSI

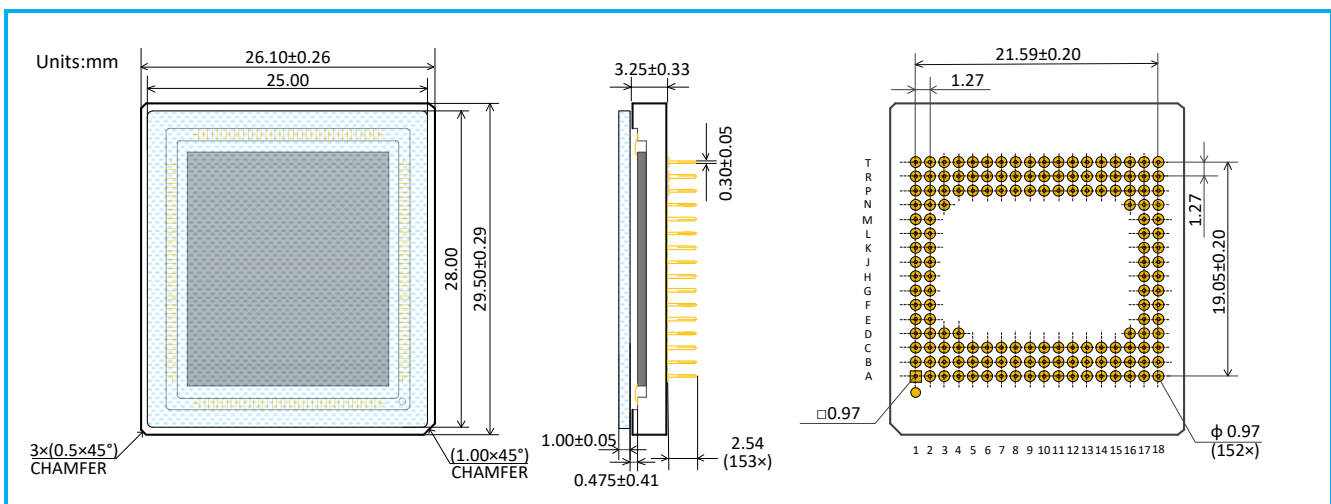


SENSOR DESCRIPTION

Designed with the state-of-art backside illuminated scientific CMOS technology, GSENSE2020BSI is a 4 Megapixel sensor with 6.5µm pixel size, featuring 94% quantum efficiency and a readout noise of less than 1.2e⁻ with correlated multi-sampling (CMS). Ideal for bio-imaging, life science, astronomy and scientific imaging, GSENSE2020BSI also provides a solution for industrial inspection requiring superior UV sensitivity thanks to its high frame rate and global reset rolling shutter. GSENSE2020BSI is pin-compatible with GSENSE2020s and GSENSE2011s, allowing easy hardware integration with minimized development effort and fast time-to-market.

DESIGN SPECIFICATIONS

Resolution	2048 × 2048	Pixel size	6.5µm × 6.5µm
Photosensitive area	13.3mm × 13.3mm	Shutter type	Rolling shutter with global reset
Full well charge	54ke ⁻	SNR Max	47dB
Dynamic range	90dB @ HDR	Quantum efficiency	94% @ 550nm
Dark noise	1.6e ⁻ @ 12/11bit 1.2e ⁻ @ 2 times CMS	Frame rate (HDR)	43fps @ 12bit 74fps @ 11bit
Dark current	0.2e ⁻ /p/s @ -20 °C	ADC	12/11bit
Output interface	8 LVDS @ 12bit 16 LVDS @ 11bit	Data rate	4.8Gbps @ 12bit 9.6Gbps @ 11bit
Package	153 pins micro-PGA	Chroma	Mono
Supply voltage	3.5V / 2.0V	Power Consumption	<1.2W



Please address all product inquiries to GPIXEL.

Email: info@gpixel.com