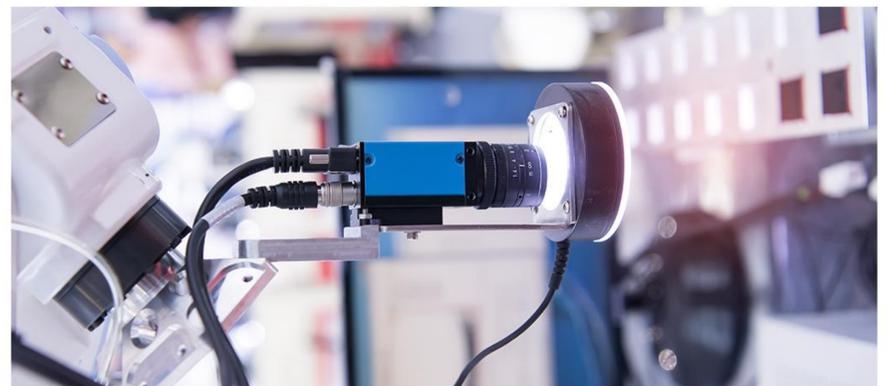


GMAX0505

26 MP GLOBAL SHUTTER IMAGE SENSOR

Designed with small 2.5 μm charge domain global shutter pixel, GMAX0505 offers the high resolution of 25 Megapixels within 1.1" optical format. Despite its small pixel pitch, GMAX0505 achieves more than 65% peak QE and excellent angular response thanks to the latest light pipe technology. In addition, with optimized tungsten shielding structure on top of the pixel's memory node, the sensor's shutter efficiency is more than 80 dB. GMAX0505 supports 10 bit and 12 bit output, and the frame rate is up to 150 fps.

The sensor is assembled in a ceramic Land Grid Array (LGA) package, allowing easy integration and mass production. The superior performance and the cost-effective packaging of GMAX0505 offer camera manufacturers great advantage over various applications.



Key Features and Benefits

- ▶ 2.5 μm Global Shutter Pixel
- ▶ High Resolution GS in 1.1" Optical Format
- ▶ Optimized Tungsten Shielding Structure
- ▶ NIR Enhanced – Red Fox
- ▶ High Speed and Good PLS
- ▶ Pin-Compatible with GMAX2505, GMAX2509 and GMAX2518

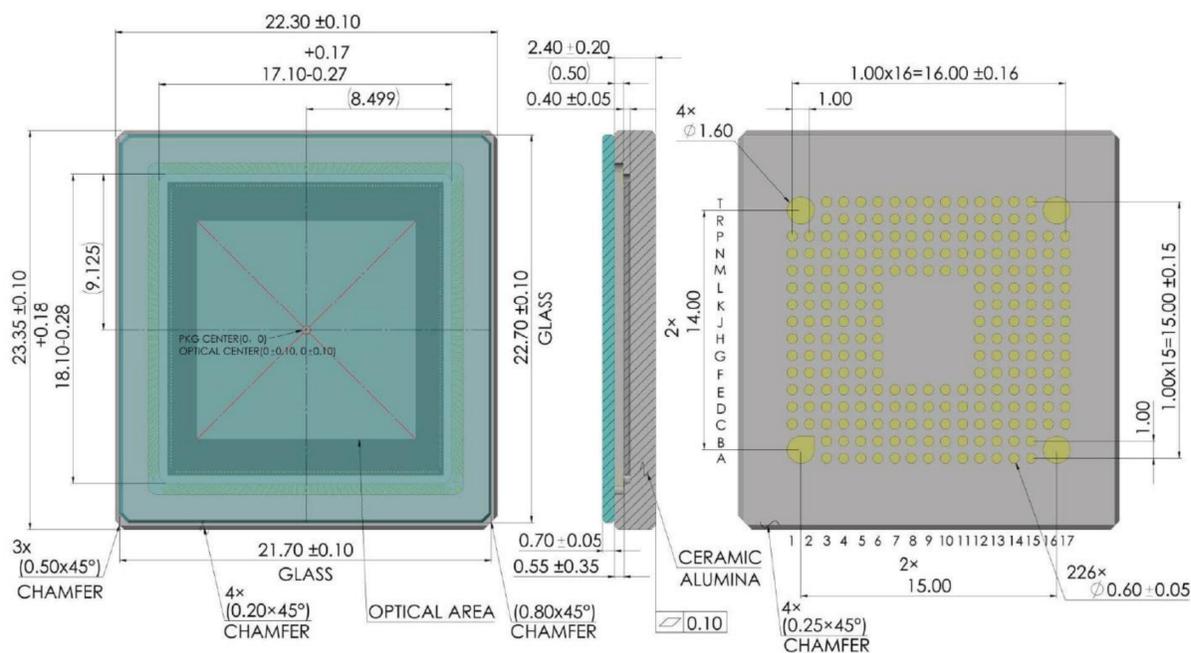
Application

- ▶ Automation & Inspection
- ▶ Logistic & Positioning
- ▶ Metrology

Specifications

Nr of Active Pixels	5120(H) x 5120(V)	Optical Format	1.1"
Pixel Size	2.5 μm x 2.5 μm	Photosensitive Area	12.8 mm x 12.8 mm
Shutter Type	Global Shutter	Parasitic Light Sensitivity	<-80 dB
Peak QE	65.5% (500 nm)	Angular Response	>13° (80% Response)
Full Well Capacity	6.5 ke ⁻ (PGA gain 1.0x)	Temporal Noise	1.6 e ⁻ (12 bit, PGA gain 5x) 3.4 e ⁻ (10 bit, PGA gain 2.5x)
Max. SNR	38.1 dB (PGA gain 1.0x)	Dynamic Range	65.8 dB (12 bit, PGA gain 2.5x) 61.4 dB (10 bit, PGA gain 2.5x)
Dark Current	1.0 e ⁻ /pixel/s (30°C)	ADC	10/12 bit
Max Frame Rate	150 fps (10 bit) 42 fps (12 bit)	Output Format	48 ch Sub-LVDS
Power Consumption	<1.1W (12 bit) <1.5 W (10 bit)	Max. Data Rate	46.08 Gbps
Supply Voltage	3.3 V/1.3 V (analog) 1.8 V-3.3 V (IO) 1.3 V (digital)	Channel Multiplexing	48/24/16/12/8/6/4/2
Chroma	Mono Mono (NIR enhanced) RGB Color	Package	226 pins LGA (22.3 mm x 23.4 mm)

Package Drawing



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Disclaimer: The product information and pictures in this flyer are for reference only. For the latest information please visit www.gpixel.com.
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