



GMAX3413

12.7 MP GLOBAL SHUTTER IMAGE SENSOR

GMAX3413 12.7 MP resolution into a 4/3" image format in a wide aspect ratio offering an optimal coverage of the field of view of interest in the intended applications such as Intelligent Traffic System (ITS) and logistics and parcel sorting. Like other GMAX products, the advanced low noise global shutter technology and generous pixel achieves a full well capacity of 8.6 ke^- and noise of 2.3 e^- which delivers more than 71.4 dB linear dynamic range. Gpixel's Red Fox technology is employed to deliver a NIR-enhanced QE of 30% (850 nm) for excellent performance in intelligent traffic systems.

GMAX3413 is configurable through SPI or I²C and supports on-chip color offset calibration, LED flicker mitigation, multiple region HDR and OTP functions.



Key Features and Benefits

- ▶ Low Noise, Large Size Global Shutter Pixel Provided Optimal SNR
- ▶ Wide Aspect Ratio
- ▶ LED Flicker Mitigation
- ▶ Multiple Region HDR
- ▶ Vertical and Horizontal ROI
- ▶ Vertical and Horizontal Image Flipping
- ▶ Excellent PLS and Angular Response
- ▶ On-chip Color Offset Calibration

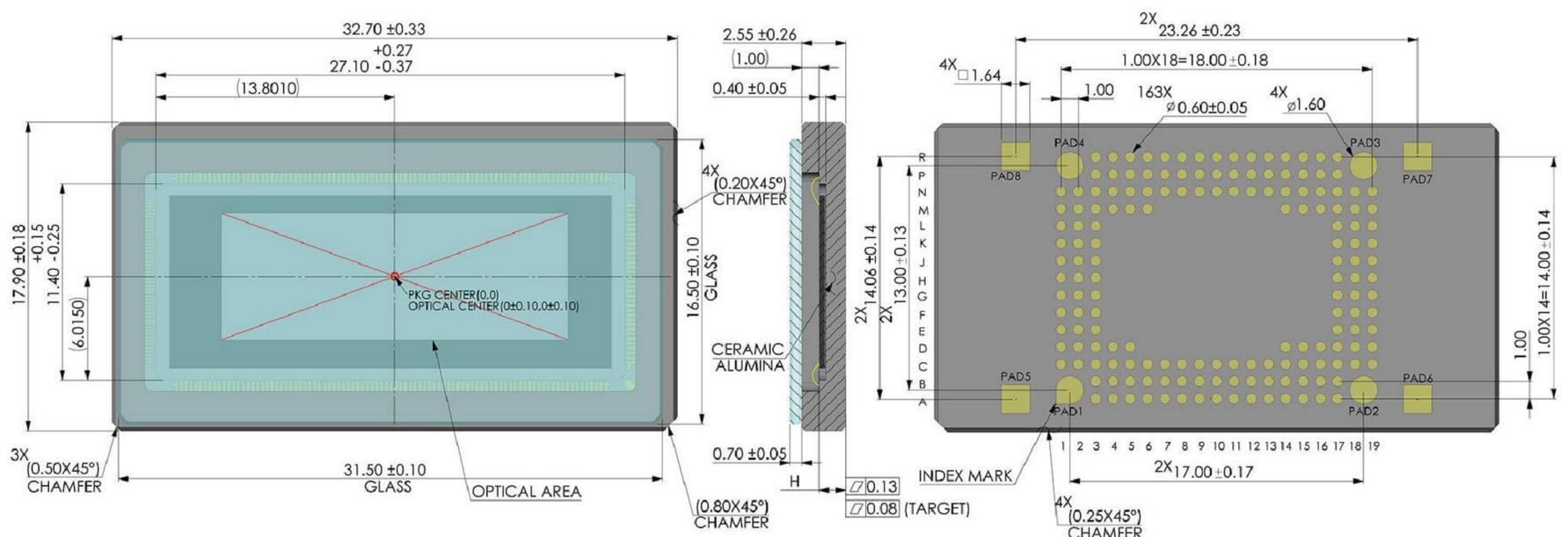
Application

- ▶ Traffic & Transportation
- ▶ Logistics and parcel sorting
- ▶ Automation & Inspection

Specifications

Nr of Active Pixels	5900(H) x 2160(V)	Optical Format	4/3"
Pixel Size	3.4 μm x 3.4 μm	Photosensitive Area	20.1 mm x 7.3 mm
Shutter Type	Global Shutter	Parasitic Light Sensitivity	-92.0 dB
Peak QE	62.7% (540 nm)	Angular Response	> 15° (80% Response)
Full Well Capacity	8.6 ke ⁻	Temporal Noise	2.3 e ⁻
Max. SNR	39.3 dB	Dynamic Range	71.4 dB
Dark Current	81 e ⁻ /pixel/s (35 °C)	ADC	12 bit
Max Frame Rate	32 fps	Output Format	8 ch Sub-LVDS
Power Consumption	<1.2 W	Max. Data Rate	7.68 Gbps
Supply Voltage	3.3 V/3.6 V (analog) 1.8 V-3.3 V (IO) 1.3 V (digital)	Channel Multiplexing	8/4
Chroma	Bayer RGB, Mono	Package	163 pins LGA (32.7 mm x 17.9 mm)

Package Drawing



Contact Gpixel

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