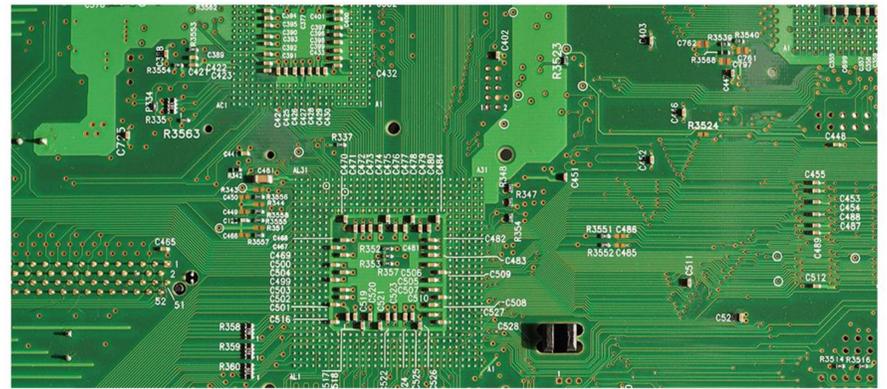


GMAX32152

152 MP GLOBAL SHUTTER IMAGE SENSOR

GMAX32152 is an ultra-high resolution global shutter CMOS image sensor in medium format. Using a state-of-the-art charge domain pixel architecture, this sensor delivers an attractive combination of high frame rate and high dynamic range. A native 12 bit performance pixel achieves 67.3 dB dynamic range, combined with a high speed sub-LVDS delivering 16 fps. Pixel data is read out over serial differential pairs, with source synchronous clock and control channel.

Its medium format image area and wide aspect ratio make it well suited for aerial mapping and surveying applications and cultural heritage digitization.



Key Features and Benefits

- ▶ 3.2 μm Global Shutter Pixel
- ▶ large Image Plane of 60.6 mm Diagonal
- ▶ High Data Throughput up to 960 Mbps
- ▶ Low Noise Global Shutter
- ▶ High Speed and Good PLS

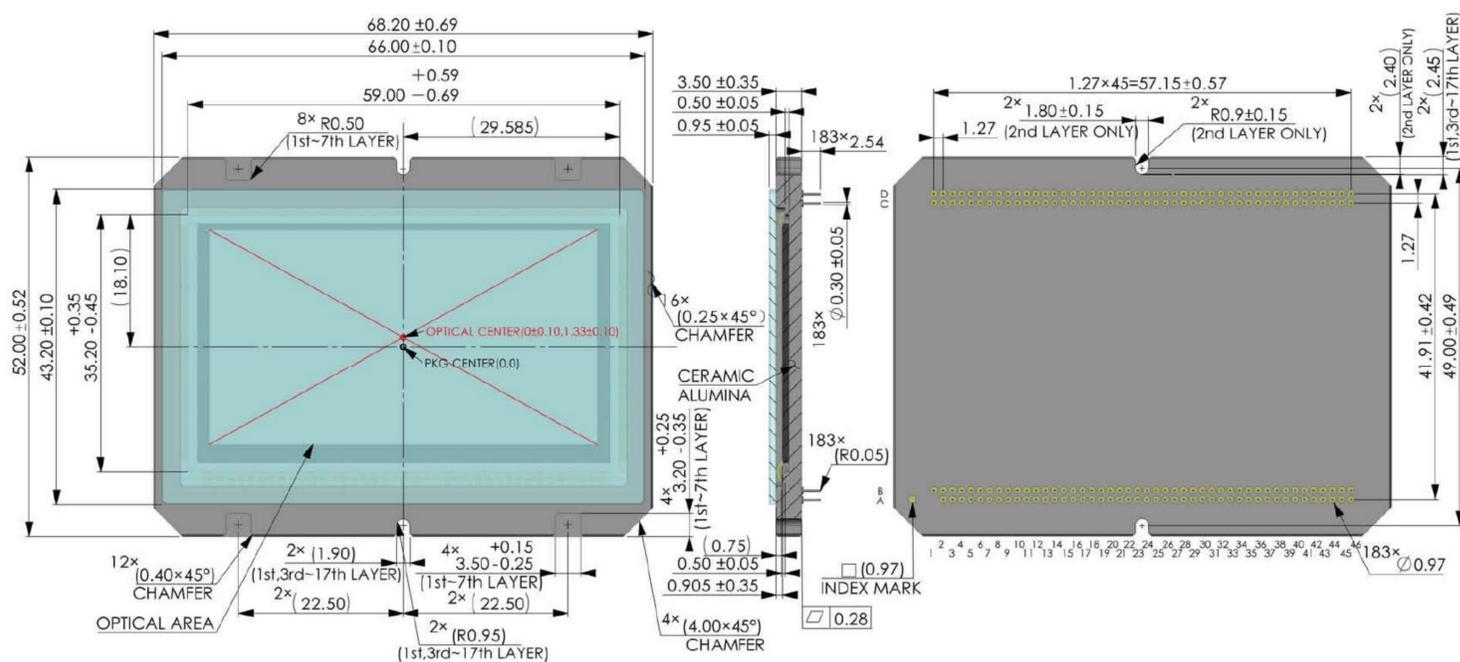
Application

- ▶ Automation & Inspection
- ▶ Metrology

Specifications

Nr of Active Pixels	16556(H) x 9200(V)	Optical Format	3.7"
Pixel Size	3.2 μm x 3.2 μm	Photosensitive Area	53.0 mm x 29.4 mm
Shutter Type	Global Shutter	Parasitic Light Sensitivity	<-83.5 dB
Peak QE	66.9% (500 nm)	Angular Response	>15° (80% Response)
Full Well Capacity	9.3 ke ⁻ (PGA gain 1.4x)	Temporal Noise	4.0 e ⁻ (PGA gain 1.4x)
Max. SNR	39.6 dB (PGA gain 1.4x)	Dynamic Range	67.3 dB (PGA gain 1.4x)
Dark Current	1.4 e ⁻ /pixel/s (30°C)	ADC	12 bit
Max Frame Rate	16 fps	Output Format	38 ch Sub-LVDS
Power Consumption	<2.8 W	Max. Data Rate	36.48 Gbps
Supply Voltage	3.3 V/1.3 V (analog) 2.5 V – 3.3 V (IO) 1.2 V (digital)	Channel Multiplexing	38/20/14/11/8/5
Chroma	Mono, RGB Color	Package	183 pins μ PGA (68.2 mm x 52.0 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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