

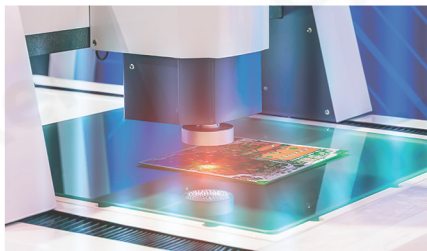
# GMAX Series

GLOBAL SHUTTER IMAGE SENSORS WITH  
RESOLUTION UP TO 152MP

## GMAX HIGH RESOLUTION

The GMAX High Resolution family consists of four CMOS image sensors ranging from 51 MP to 152 MP. All sensors in the family incorporate high-performance charge domain global shutter pixels delivering high quantum efficiency and the low noise pixel architecture achieves >65 dB dynamic range needed for demanding applications like 3D AOI, flat panel inspection, aerial imaging and video applications. Multiple sub-LVDS outputs with multiplexing options allow the user to optimize their camera design for their application's required frame rate. All GMAX High Resolution sensors are available in both color and monochrome variants and are provided in ceramic PGA housing with double sided AR glass lid.

Gpixel's broad and expanding portfolio of high-resolution global shutter image sensors enable our customers to provide optimized solutions to the most demanding inspection and video applications.



### Product Family Features

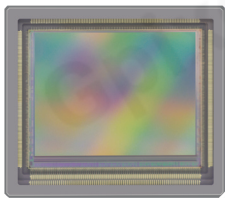
- ✓ High Frame Rates
- ✓ High Data Rates
- ✓ Flexible ROI read out
- ✓ High Resolution
- ✓ Industry standard sub LVDS outputs with channel multiplexing
- ✓ Optical Black columns and rows
- ✓ On-chip sequencer and SPI control
- ✓ One Time Programmable memory (OTP)

### Applications

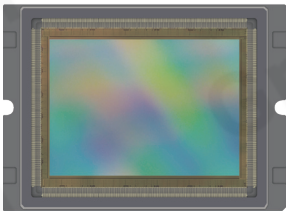
- ✓ Automation
- ✓ PCB Inspection
- ✓ FPD Inspection
- ✓ Aerial Imaging
- ✓ Video Broadcasting

Gpixel

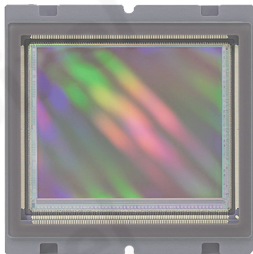
Sensor Specifications



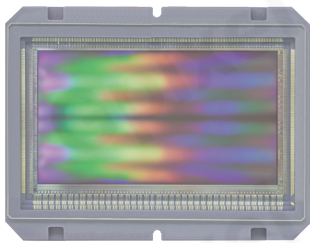
GMAX3249 49MP  
GMAX3265 65MP



GMAX4651 51MP



GMAX32103 103MP



GMAX32152 152MP

Pixel	3.2 μm GS	4.6 μm GS	3.2 μm GS	3.2 μm GS
Opt. Format	49MP: 31.7 mm APS-H 65MP: 35 mm Full Frame	35 mm Full Frame	47 mm Med Format	61 mm Med Format
Resolution	49MP : 7008 x 7000 65MP : 9344 x 7000	8424 x 6032	11276 x 9200	16556 x 9200
Chroma	Mono RGB	Mono RGB	Mono RGB	Mono RGB
FWC <sub>max</sub>	10.9 ke <sup>-</sup>	18.0 ke <sup>-</sup>	9.0 ke <sup>-</sup>	9.3 ke <sup>-</sup>
Noise <sub>min</sub>	1.9 e <sup>-</sup>	7.6 e <sup>-</sup>	4.3 e <sup>-</sup>	4.0 e <sup>-</sup>
DR <sub>max</sub>	66.0 dB	65.5 dB	66.4 dB	67.3 dB
QE <sub>max</sub>	65% @ 500 nm	67% @ 510 nm	67% @ 500 nm	67% @ 500 nm
Frame Rate @Bitmode	71 fps @ 10 b 31 fps @ 12 b	30 fps @ 12 b	24 fps @ 12 b	16 fps @ 12 b
Power	<2.1 W	<2.8 W	<2.5 W	<2.8 W
Interface	HS: 56 sLVDS @ 900 M NS: 28 sLVDS @ 900 M	24 sLVDS @ 864 M	52 sLVDS @ 960 M	38 sLVDS @ 960 M
Package	41.7 x 35.7 mm <sup>2</sup> 239p μPGA	58.6 x 42.0 mm <sup>2</sup> 238p PGA	49.5 x 49.5 mm <sup>2</sup> 209p μPGA	68.2 x 52.0 mm <sup>2</sup> 183p μPGA
Availability	EVK & MP	EVK & MP	EVK & MP	EVK & MP

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