

51MP Global Shutter CMOS Image Sensor – GMAX4651


Applications:

- High Resolution Industrial Inspection
- Machine Vision
- 8K Broadcasting

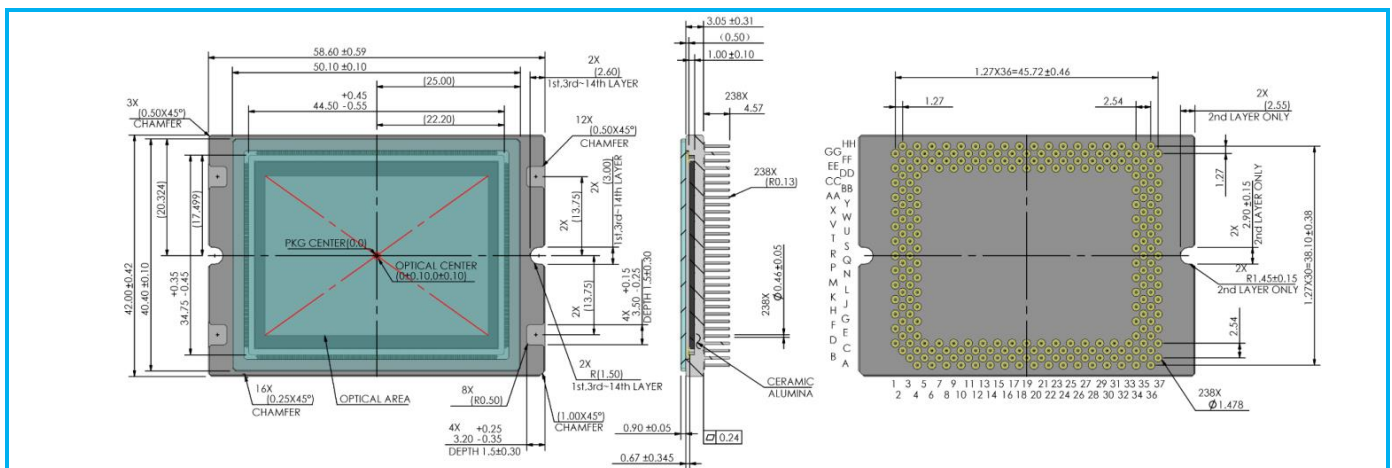
SENSOR DESCRIPTION

GMAX4651 is a 51 Megapixel (8424x6032) full frame(35mm) global shutter image sensor designed using the latest 4.6µm charge domain global shutter pixel. Using the advanced 65nm CIS process, it provides 18ke⁻ FWC, 7.6e⁻ median dark noise and more than 65dB intra-scene dynamic range. With the light pipe technology, sensor achieves >67% QE @510nm and 1/40,000 shutter efficiency.

GMAX4651 delivers 30fps in single gain operation mode running at 864Mbps. GMAX4651 is assembled with 238 pins PGA ceramic package and the optical center is fully aligned with the package mechanical center. The unique features make it an ideal solution for demanding imaging applications like machine vision, 8K broadcasting and high-end industrial inspections.

SENSOR SPECIFICATION

Resolution	8424 × 6032	Optical format	35mm Full Frame
Pixel size	4.6µm × 4.6µm	Photo-sensitive area	38.75mm x 27.75mm
Shutter type	Global Shutter	Quantum efficiency	67%@510nm
Full well capacity	18ke ⁻ @PGA x3.5 12.5ke ⁻ @PGA x5	Dark noise	9.5e ⁻ @PGA x3.5 7.6e ⁻ @PGA x5
Dynamic range	65.8@PGA x3.5 64.3@PGA x5	Dark current	6e ⁻ /p/s @ 45 °C
ADC	12bit	Frame rate	30fps
Output interface	24 x sub-LVDS	Channel multiplexing	24/14/8/6/4
Max. Data rate	21Gbps	Shutter efficiency	1/40,000
CRA	>15° @ 80% response	Package	238-pin PGA
Chroma	Mono & RGB Color	Power consumption	2.7W

PACKAGE OUTLINE


Please address all product inquiries to GPIXEL.

Email: info@gpixel.com