Gpixel

152MP Ultra-High Resolution GS CMOS Image Sensor

SENSOR DESCRIPTION

GMAX32152 is an ultra-high resolution global shutter CMOS image sensor in medium format. Using a state-ofthe-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 display inspection, aerial mapping and surveying applications and cultural heritage digitization.

SENSOR SPECIFICATION

Resolution	16556 (H) x 9200 (V)	Optical format	Medium format (Ø 60.6 mm)
Pixel size	3.2 um x 3.2 um	Photo-sensitive area	53 mm x 29.4 mm
Shutter type	Global shutter	Quantum efficiency	66.9 % @ 500 nm(T.B.D)
Full well capacity	9300 e-	Shutter efficiency	-83.5 dB
Dark noise	4 e-	Dark current	12 e-/s (47C die temperature)
Dynamic range	67.3 dB	Frame rate	16 fps
Output interface	38x sub-LVDS pairs	Channel multiplexing	38 20 14 11 8 5
ADC	12-bit	Max. Data rate	36.48 Gbps (@ 960 Mbps / ch)
Chroma	Bayer RGB / Mono	Package	183 pins uPGA
Power supply	3.3V 1.3V 1.2V	Power consumption	<2.8 W

PACKAGE OUTLINE



Subject to change without notice. Please address all product inquiries to GPIXEL

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