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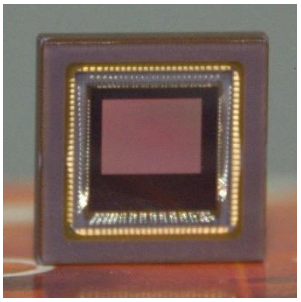
LUX530

The LUXIMA™ LUX530 image sensor is a 1/2" 832 x 632 @ 1,986 FPS Global Shutter CMOS Digital Sensor for applications in the 3D scanning, intraoral scanning, dental, motion analysis, laser triangulation, line profiling, and wafer inspection markets. It allows ease of integration with on-chip voltage regulator, ADC, reference generator, and reference driver. It can be windowed down to achieve faster frame rates. The sensor supports 8 simultaneous Region-Of-Interest readouts with flexible window positions. Color and monochrome options are offered in a 100 pin LGA package with a small footprint of 13.0 mm × 13.0 mm.



Optical format	1/2"
Active resolution	832 × 632 pixels
Pixel	6.6 um pitch PPD global shutter pixel
Full well	9,000 e-
Read noise	26 e-
Responsivity	8.5 V/Lux-s @ 525 nm without color filter
High dynamic range mode	Dual-slope response supported
Frame rate	1,986 FPS @ 832 × 632 2,091 FPS @ 800 × 600 2,608 FPS @ 640 × 480
Region of interest	Windowing and up to 8 simultaneous ROI's are supported
Analog to digital converter	12 bit
Analog gain options	1x – 8x
Clock rate	100 MHz
Data output	**#bit output** — **Data Rate Per Channel** 8 — 800 Mbps 10 — 1000 Mbps 12 — 1200 Mbps 16 LVDS channels Multiplex Mode (8 LVDS, 4 LVDS or 2 LVDS channels)
Power supply	3.6V, 2.1V Analog, 2.1V Digital
Power consumption	870mW @ 1,986 FPS Full Resolution
Package type	100 pin LGA package in a small footprint of 13.0 mm × 13.0 mm
Color filter	Color or Monochrome

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