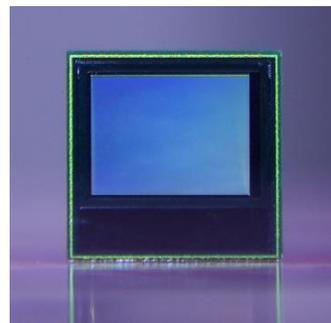


LUX410

The LUXIMA™ LUX410 image sensor is a 1/2" 832 x 632 @ 960 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 BGA Chip-scale package with a small footprint of 7.63 mm × 7.43 mm.



Optical format	1/2"	
Active resolution	832 × 632 pixels	
Pixel	6.6 um pitch PPD global shutter pixel	
Full well	15,000 e-	
Read noise	35 e-	
Responsivity	9.5 V/Lux-s @ 525 nm without Color filter	
High dynamic range mode	Dual-slope response supported	
Frame rate	960 FPS @ 832 × 632 1050 FPS @ 800 × 600 1320 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 – 10x	
Clock rate	65 MHz	
Data output	#bit output	Data Rate Per Channel
	8	520 Mbps
	10	650 Mbps
	12	780 Mbps
	8 LVDS ports standard Multiplexer Mode (4 LVDS, 2 LVDS ports)	
Power supply	3.6V Analog, 2.1V Analog, 2.1V Digital	
Power consumption	500mW @ 960 FPS Full Resolution	
Package type	BGA Chip-scale package in a small footprint of 7.63 mm × 7.43 mm	
Color filter	Color RGB or Monochrome	