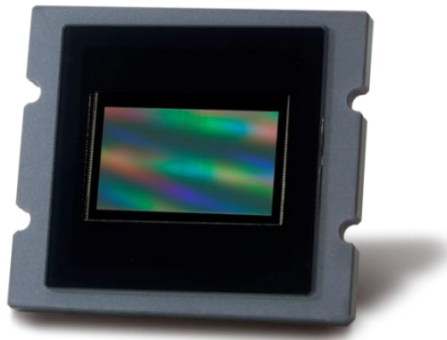


15Megapixels CMOS Image Sensor – GSENSE5130



Features

- 5K resolution scientific-grade image sensor
- APS-C format and 70fps @ 11-bit rolling HDR
- Dynamic range up to 80dB@rolling and 70dB@global

Applications

- 5K High-end Cameras for Film and Broadcast
- DNA Sequencing and Bio Imaging
- High-end Security and Surveillance
- High resolution scientific imaging

SENSOR DESCRIPTION

Designed with scientific-grade image sensor specifications, GSENSE5130 is the first 5K resolution image sensor with frame rate up to 70fps, and the frame rate can be further increased with row-based ROI windowing. GSENSE5130 features dark current less than $3e^-/s/pix@25^{\circ}C@Rolling\ HDR$, and large open area at the bottom of the ceramic package available for heat dissipation or cooling. GSENSE5130 is available in Mono and RGB.

SENSOR SPECIFICATIONS

Optical format	APS-C format	Full well charge	16.5ke ⁻ (Rolling HDR)
Resolution	5056×2968	SNR Max	41.7dB
Pixel size	4.25μm×4.25μm	Dark noise (11bit)	2e ⁻
Shutter type	Rolling & Global shutter	Dark noise (12bit)	1.55e ⁻
ADC	10/11/12bit	Quantum Efficiency	71%@570nm(Mono)
Output interface	40 LVDS@11-bit	Max Frame rate	67fps@11-bit Rolling HDR
	20 LVDS@12-bit		134fps@11-bit Rolling STD
			32fps@12-bit Rolling HDR
PRNU	1.8%@11bit	Dark current	$3e^-/s/pix@25^{\circ}C$
	1.4%@12bit		
Power consumption	2.0W@11bit HDR	Dynamic range	78dB (11bit HDR)
	1.8W@12bit HDR		80dB (12bit HDR)
Supply voltage	3.3V / 1.8V	Operating temperature	-55°C~+85°C
Package	249 pins μPGA	Chroma	Mono and Color

