

GCINE4349

49 MP 4.3 μm ROLLING SHUTTER STACKED BSI CMOS IMAGE SENSOR

GCINE4349 is an 8K video HDR full frame (35.2 x 25.8 mm²) stacked BSI image sensor designed with large 4.3 μm pixels. It achieves a stunning 120 fps with 16 bit pixel output and achieves a max Dynamic Range of 110 dB for HDR mode. Several read out modes are supported to read out 8K or binned 4K video resolution combined with dual gain HDR modes as well as a DSC mode targeting still photography. The stacked BSI architectures allows high data rates to achieve 120 fps (8K) or even 240 fps (4K) video resolution, all with a pixel bit depth of 16 bit/pixel interfaced over 64 Sub LVDS channels (1.2 Gbps/channel).

These unique features make it an ideal solution for high end video as well as photography applications and other high resolution, high performance applications.



Key Features and Benefits

- ▶ Stacked BSI Architecture
- ▶ High Full Well Charge
- ▶ High Dynamic Range
- ▶ Low Noise
- ▶ Multi-Slope HDR
- ▶ Dual Gain HDR

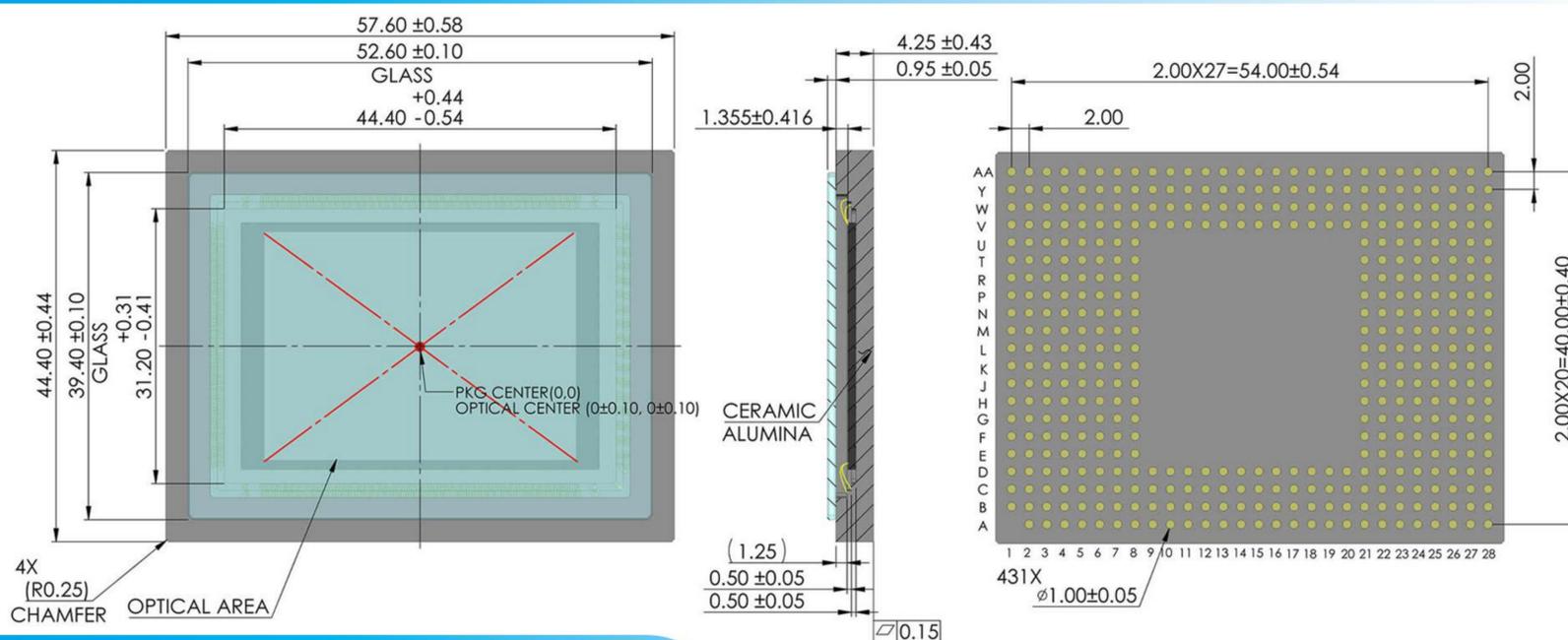
Applications

- ▶ Cinematography
- ▶ Unmanned Aerial Vehicles (UAV)

Specifications

Nr of Active Pixels	8192 (H) x 6000 (V)	Optical Format	2.2" (Full Frame)
Pixel Size	4.3 μm x 4.3 μm	Photosensitive Area	35.2 mm x 25.8 mm
Shutter Type	Rolling Shutter & DSC	Peak QE	85% (500 nm)
Full Well Capacity	152 ke^-	Temporal Noise	1.9 e^-
Max. SNR	52.1 dB	Dynamic Range	86.4 dB
Max Frame Rate	120 fps (8K) 240 fps (4K)	Output Format	64 ch Sub-LVDS
Max. Data Rate	76.8 Gbps	ADC	16 bit
Chroma	RGB Color	Power Consumption	7.6 W (8K HDR)
Supply Voltage	3.6 V, 3.1 V, 1.8 V 1.25 V, -2.2 V	Package	431 pins LGA (57.6 mm x 44.4 mm)

Package Drawing



Contact Gpixel

GPIXEL CHINA CHANGCHUN (HQ)

Building 5, Optoelectronic Information
Industrial Park, 7691 Ziyou Road,
130033 Changchun, Jilin, China

Phone: +86-431-85077785

Disclaimer: The product information and pictures in this flyer are for reference only. For the latest information please visit www.gpixel.com.

GP-PR250801 V1.1

GPIXEL EUROPE

Gpixel NV
Copernicuslaan 60, 2018
Antwerpen, Belgium

Phone: +32-33034442

GPIXEL JAPAN

Gpixel Japan Co., Ltd.
TOC Osaki Building 18th Floor, 1-6-1 Osaki,
Shinagawa-ku, Tokyo, 141-0032 Japan

Phone: +81-03-5962-1600

