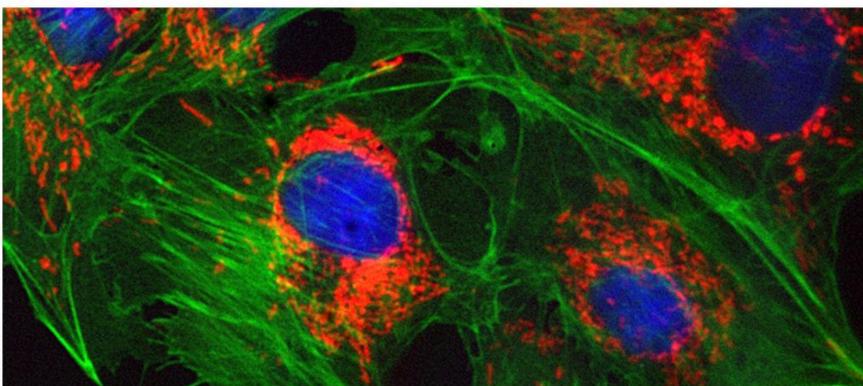


GSENSE4040

16.8 MP ROLLING SHUTTER IMAGE SENSOR

GSENSE4040 is a 16.8 Mega pixel resolution CMOS image sensor. Featured with five transistor (5T) HDR pixel design on a 9 μm pitch, the sensor could achieve 3.7 e^- dark noise and 74.2 ke^- FWC simultaneously in HDR mode. GSENSE4040's maximum frame rate (will full resolution) is 24 fps in HDR mode. It supports 2 x 2 charge binning mode in which x 4 frame rate is achieved. These features make GSENSE4040 an ideal image sensor for various applications.

GSENSE4040 is offered in two variations: CMN and CMT. CMN is a monochrome sensor without microlens array and protected by a removable glass lid, which is ideal for X-ray imaging, charged particle detection, and micro-CT application; while CMT is a monochrome sensor with microlens array and sealed with D263[®] T lids with anti-reflective coating on both sides, ideal for medical imaging and astronomy applications.



Key Features and Benefits

- ▶ Peak QE of 73.9%
- ▶ Large Format
- ▶ High Dynamic Range

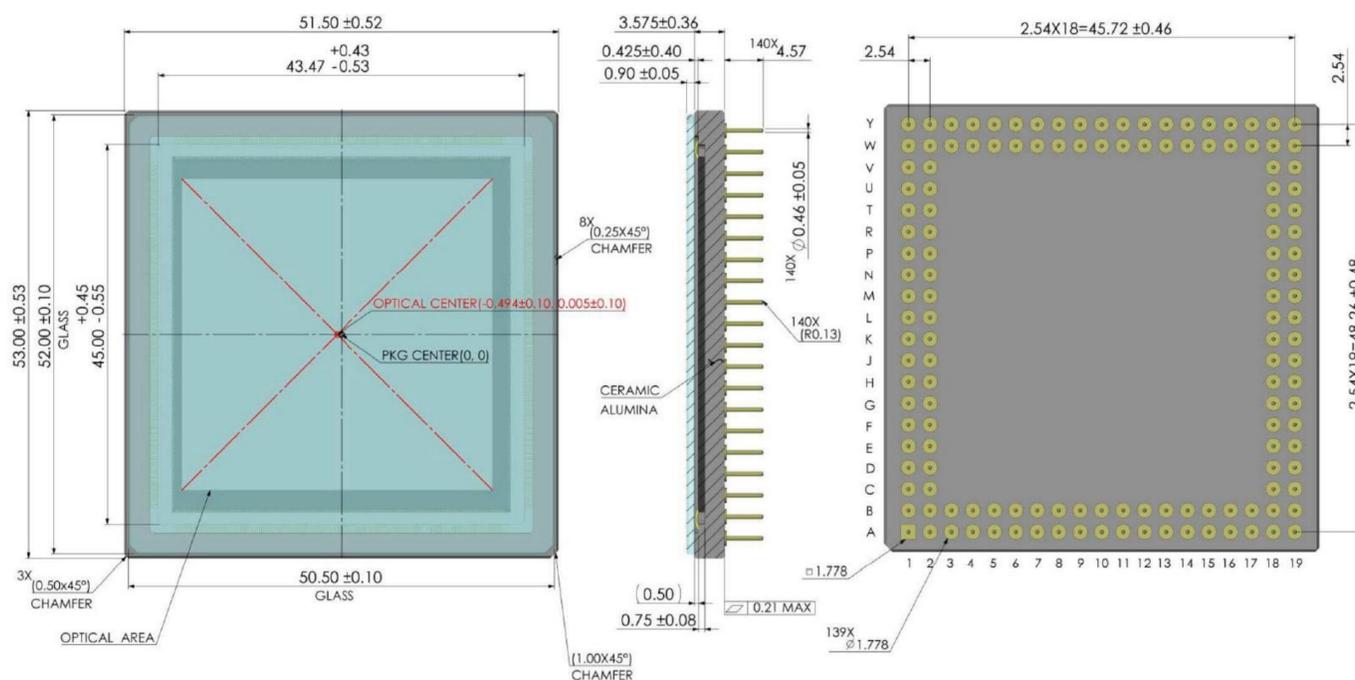
Application

- ▶ Spectroscopy
- ▶ Life Sciences
- ▶ Astronomy
- ▶ Microscopy
- ▶ X-Ray

Specifications

Nr of Active Pixels	4096(H) x 4096(V)	Optical Format	3.3"
Pixel Size	9 μm x 9 μm	Photosensitive Area	36.864 mm x 36.864 mm
Shutter Type	Rolling Shutter	Peak QE	73.9% (600 nm)
Full Well Capacity	74.2 ke ⁻	Temporal Noise	3.7 e ⁻
Dark Current	12.2 e ⁻ /pixel/s (25°C)	Dynamic Range	86 dB
Max Frame Rate	24 fps	Output Format	18 ch LVDS
Max. Data Rate	10.8 Gbps	ADC	12 bit
Chroma	Mono	Power Consumption	< 1.4 W
Supply Voltage	3.3 V (analog) 1.8 V (digital)	Package	140 pins PGA (51.5 mm x 53.0 mm)

Package Drawing



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