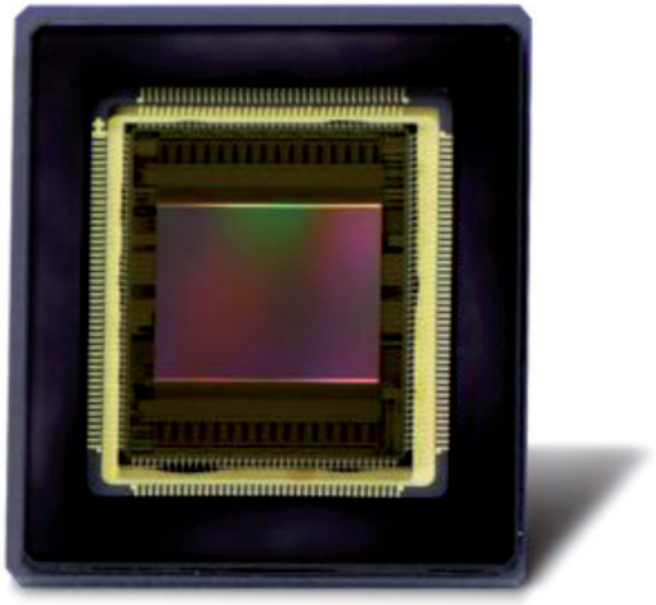
Sci-CMOS 2016
3 Megapixels CMOS Image Sensor

Preliminary Short Form Datasheet



Sensor descriptions:

Sci-CMOS 2016 is a 2/3” format scientific-grade image sensor with frame rate higher than 250 fps, and the frame rate can be further increased with row-based ROI windowing.

Sci-CMOS 2016 features dark current less than 10 e^-/p/s @ 20 °C, and large open area at the bottom of the ceramic package available for heat dissipation or cooling.

These features make it ideal for professional applications. Sci-CMOS 2016 is available in Mono and RGB, and sampling starts in May 2016.

Sensor features:

- Scientific-grade image sensor with low dark current
- 2/3” format and > 250 fps @ full resolution
- Dynamic range up to 82dB @ rolling and 70 dB @ global

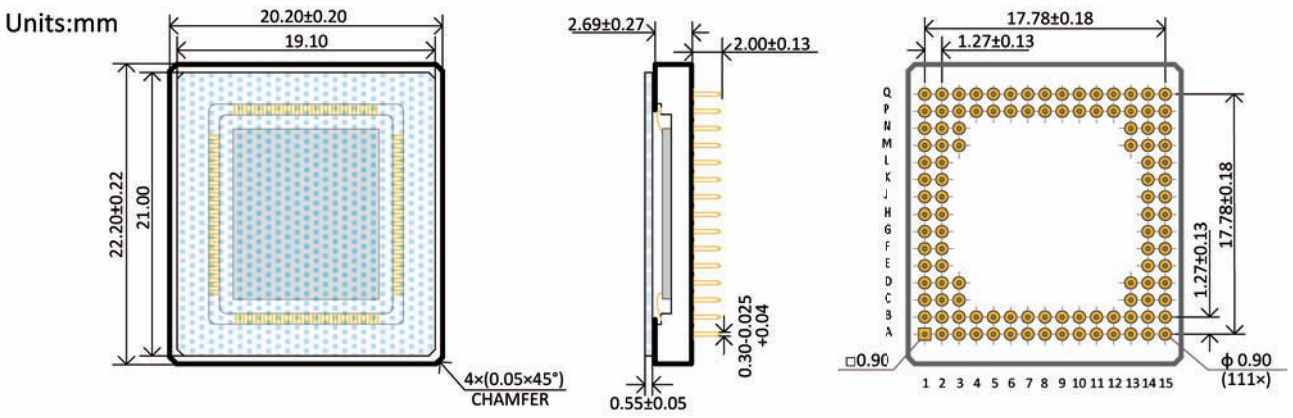
Applications:

- Scientific imaging
- Industrial inspection
- Security and surveillance

Sensor Specifications:			
Optical format	2/3”	Full well charge	15.76 ke^-
Resolution	2032 x 1568	SNR Max	41.23 dB
Pixel size	4.25 µm × 4.25 µm	Dark noise (Rolling)	1.16 e^-
Shutter type	Rolling & Global shutter	Dark noise (Global)	3.5 e^-
ADC	10 / 12 bit	Quantum Efficiency	> 60 % @ 600 nm
Output interface	16 LVDS @ 11 bit 8 LVDS @ 12 bit	Dynamic range	82 dB (rolling HDR) 70 dB (global HDR)
PRNU	< 1 %	Dark current	< 10e^-/p/s @ 20 °C
Supply voltage	3.3 V / 1.8 V	Operating temperature	-55 °C~ +85 °C
Power consumption	< 1 W	Package	112 pins µPGA

Frame Rate:		
Rolling STD mode	244 fps @ 11 bit ADC	122 fps @ 12 bit ADC
Rolling HDR mode	122 fps @ 11 bit ADC	61 fps @ 12 bit ADC
Global CDS mode	122 fps @ 11 bit ADC	61 fps @ 12 bit ADC
Global CDS HDR mode	61 fps @ 11 bit ADC	30 fps @ 12 bit ADC

Package:



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