

XGS 16000

CMOS Image Sensor, 16 MP, Global Shutter

Product Overview

For complete documentation, see the data sheet.

Product Information

The XGS 16000 is a 16.0 Mp (4000 x 4000) CMOS image sensor in 1.1 inch optical format, supporting up to 65 frame per second readout at full resolution.

The device provides cost effective high resolution, global shutter imaging with high readout speed for industrial imaging customers while using the maximum pixel size available within the available field of View (FOV) of a 1.1" optical format. A compact package design and low power footprint make the device compatible with a 29 x 29 mm² camera footprint. Three speed grades are available to match device output to key computer interfaces and application requirements.

The XGS 16000 shares a common design architecture and footprint with other members of the XGS family ranging from 2Mp up to 16Mp, allowing one camera design to support multiple resolutions to simplify and speed time to market for new camera designs.

The XGS 16000 is available in a 163-pin iLGA package in both monochrome and Bayer color configurations.

Features

- Advanced 3.2 μm global shutter pixel
- Energy efficient design
- Available speed grades
- Compact package
- 1:1 (square) aspect ratio

Applications

- Image capture

Benefits

- High resolution with high image quality and uniformity
- Reduced power and thermal footprints
- Match to key computer interface and application requirements
- Compatible with 29 x 29 mm² camera design
- Maximize image capture within lens optical circle

End Products

- Industrial cameras and systems
- Inspection system (food, bottles, recycling labels, etc.)
- Security cameras and systems
- Machine Vision camera

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
NOIX1SE016KB-LTI		 	Active	CMOS	16	65	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	ILGA163 21.5x19.5, 1P
NOIX1SN016KB-LTI		 	Active	CMOS	16	65	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Mono	ILGA163 21.5x19.5, 1P
NOIX2SE016KB-LTI		 	Active	CMOS	16	42	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	ILGA163 21.5x19.5, 1P
NOIX2SN016KB-LTI		 	Active	CMOS	16	42	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Mono	ILGA163 21.5x19.5, 1P
NOIX3SE016KB-LTI		 	Active	CMOS	16	21	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	ILGA163 21.5x19.5, 1P
NOIX3SN016KB-LTI		 	Active	CMOS	16	21	1.1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Mono	ILGA163 21.5x19.5, 1P