

## Product Overview

### XGS 12000: CMOS Image Sensor, 12.6 MP, Global Shutter

For complete documentation, see the data sheet.

The XGS 12000 is a 12.6 Mp (4096 x 3072) CMOS image sensor in 1 inch optical format, supporting up to 90 frame per second readout with 12-bit output at full resolution.

The device provides high resolution, global shutter imaging with high readout speed for industrial imaging customers. A compact package design and low power footprint make the device compatible with a 29 x 29 mm<sup>2</sup> camera footprint. Two speed grades are available to match device output to key computer interfaces and application requirements.

The XGS 12000 shares a common design and footprint with other members of the XGS family, allowing one camera design to support multiple resolutions to simplify and speed time to market for new camera designs.

The XGS 12000 is available in a 163-pin LGA package in both monochrome and Bayer color configurations.

#### Features

- Advanced 3.2 µm global shutter pixel
- Energy efficient design
- Compact package
- Available speed grades

#### Benefits

- High resolution with high image quality and uniformity
- Reduced power and thermal footprints
- Compatible with 29 x 29 mm<sup>2</sup> camera design
- Match to key computer interfaces and application requirements

#### Applications

- Image capture

#### 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
NOIX1SE012KB-LTI		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	90	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	CLGA-163
NOIX1SE012KB-LTI1		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	90	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	CLGA-163
NOIX1SF012KB-LTI		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	90	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	CLGA-163
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NOIX1SN012KB-XWI		Pb-free Halide free non AEC-Q and PPAP	Product P review									
NOIX3SE012KB-LTI		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	27	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	CLGA-163
NOIX3SE012KB-LTI1		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	27	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Bayer Color	CLGA-163
NOIX3SN012KB-LTI		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	27	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Mono	CLGA-163
NOIX3SN012KB-LTI1		Pb-free Halide free non AEC-Q and PPAP	Active	CMOS	12.6	27	1 inch	Global Shutter	3.2 x 3.2	HiSPi™	Mono	CLGA-163

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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