

## 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 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 is a member of the X-Class image sensor platform, which allows one camera design to support not only multiple resolutions but also different pixel designs with only minor modifications, simplifying and speeding 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

- Member of X-Class platform
- Advanced 3.2 μm global shutter pixel
- Energy efficient design
- Compact package
- Available speed grades

#### Applications

- Image capture

#### Benefits

- Allows one camera design to support multiple resolutions and multiple pixel designs
- 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 interface and application requirements

#### End Products

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

#### Part Electrical Specifications

| Product          | Compliance             | Status | Type | Megapixels | Frame Rate (fps) | Optical Format | Shutter Type   | Pixel Size (μm) | Output Interface | Color       | Package Type |
|------------------|------------------------|--------|------|------------|------------------|----------------|----------------|-----------------|------------------|-------------|--------------|
| NOIX1SE012KB-LTI | Pb-free                | NEW    | CMOS | 12.6       | 90               | 1 inch         | Global Shutter | 3.2 x 3.2       | HiSPi™           | Bayer Color | CLGA-163     |
|                  | Halide free            |        |      |            |                  |                |                |                 |                  |             |              |
| NOIX1SN012KB-LTI | Pb-free<br>Halide free | NEW    | CMOS | 12.6       | 90               | 1 inch         | Global Shutter | 3.2 x 3.2       | HiSPi™           | Mono        | CLGA-163     |

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