

XGS 12000

CMOS Image Sensor, 12.6 MP, Global Shutter

Product Overview

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 mm² 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

Applications

- Image capture























Benefits

- High resolution with high image quality and uniformity
- Reduced power and thermal footprints
- Compatible with 29 x 29 mm² camera design
- Match to key computer interfaces 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 | Pricing (\$/Unit) | Compliance | Status | Type | Megapixels | Frame Rate (fps) | Optical Format | Shutter Type | Pixel Size (µm) | Output Interface | Color | Package Type |
|-------------------|-------------------|---|-----------------|------|------------|------------------|----------------|----------------|-----------------|------------------|-------------|--------------|
| NOIX1SE012KB-LTI | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX1SE012KB-LTI1 | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX1SF012KB-LTI | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX1SF012KB-LTI1 | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX1SN012KB-LTI | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Mono | CLGA-163 |
| NOIX1SN012KB-LTI1 | |   | Active | CMOS | 12.6 | 90 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Mono | CLGA-163 |
| NOIX1SN012KB-XWI | |   | Product Preview | | | | | | | | | |
| NOIX3SE012KB-LTI | |   | Active | CMOS | 12.6 | 27 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX3SE012KB-LTI1 | |   | Active | CMOS | 12.6 | 27 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Bayer Color | CLGA-163 |
| NOIX3SN012KB-LTI | |   | Active | CMOS | 12.6 | 27 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Mono | CLGA-163 |
| NOIX3SN012KB-LTI1 | |   | Active | CMOS | 12.6 | 27 | 1 inch | Global Shutter | 3.2 x 3.2 | HiSPi™ | Mono | CLGA-163 |