产品概览

PYTHON12K: CMOS Image Sensor, 12.5 MP, Global Shutter

欲看完整文档，请参阅数据表。

The PYTHON 12K is a 12.5 MP (4096 x 3072 pixel) 10-bit CMOS image sensor in 4/3 optical format, supporting up to 160 frame per second readout at full resolution.

High sensitivity 4.5 µm pixels support both pipelined and triggered global shutter readout modes. The sensor also supports correlated double sampling (CDS) readout in global shutter mode, reducing noise and increasing dynamic range.

The sensor is programmed using a four-wire serial peripheral interface. Black level can be calibrated automatically, or adjusted using a user programmable offset. The sensor also supports readout of up to 32 separate regions of interest (ROI) to increase frame rate. Image data is accessed through 32, 16, 8, or 4 LVDS channels, each running at 720 Mbps, and a separate synchronization channel is provided to facilitate image reconstruction.

The PYTHON 12K is packaged in a 355-pin µPGA package and is available in a monochrome, Bayer color, and extended near-infrared (NIR) configurations.

特性

- IP-CDS global shutter technology
- HW scalable family
- High configurability
- Fast adaptability
- Multiple windowing
- High frame rate

优势

- Global shutter imaging with single digit noise performance
- One camera design to support multiple resolutions
- High flexibility to optimize sensor for end application
- Fast switching between operating modes
- Speed increase from windowing in x- and y- direction
- Fast image capture capabilities

应用

- Image Capture

终端产品

- Industrial cameras and systems
- Intelligent Transportation Systems (ITS)
- Medical Imaging Systems
- Inspection systems (food, bottles, recycling labels, etc.)
- Security cameras and systems

器件电气规格

产品	Pricing ($/Unit)	Compliance	Status	Type	Megapixels	Frame Rate (fps)	Optical Format	Shutter Type	Pixel Size (µm)	Output Interface	Color	Package Type
NOIP1SE012KA-GTI		Pb-free / Halide free	Active	CMOS	12.6	160	4/3 inch	Pipelined and Triggered Global	4.5 x 4.5	LVDS	Bayer Color	CPGA-355
NOIP1SN012KA-GTI		Pb-free / Halide free	Active	CMOS	12.6	160	4/3 inch	Pipelined and Triggered Global	4.5 x 4.5	LVDS	Mono	CPGA-355

欲了解更多信息，请联系您当地的销售支援 www.onsemi.cn 。

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