## Description

Asynchronous Random- access MOS Image Sensor ARAMIS EVS100K is a user-friendly CMOS integrated image sensor using a patented architecture developed by ElecVision in order to simplify its integration into computer-based products. Different from classic CCD image sensors or some newly introduced CMOS image sensors, ARAMIS EVS100K image sensor can provide a fully clock-less and X - Y addressed image readout. This permits null or simple interface circuit to connect the sensor to a computer or DSP. Furthermore, it incorporates an array of $352 \times 290$ pixels with $352 \times 288$ effective pixels and an onchip amplifier and ADC as well.

Besides, a wide range continuous full frame electronic shutter control ability (from 1 us to 255 ms ) eliminates the need of many optical devices such as diaphragm and mechanical shutter. This is particularly attractive to compact and economic products such as videophone-oriented camera module, telesurveillance, car vision systems, consumer products, high-tech toy and so on.

## Key Features

- $352 \times 288$ effective pixels
- On-chip in-pixel analog frame-buffe
- Clock-less and $\mathrm{X}-\mathrm{Y}$ addressed image readout
- On- chip integrated video amplifier
- On-chip 8-bit A/D converter
- Fit for $1 / 3$ " lens
- Low power dissipation ( < 200 mW )
- Wide range continuous full frame electronic shutter
- Internal Black reference
- LCC- 48 package

Block Diagram


## Specification

| Pixel Pitch: | 12.1umx12.1um CMOS active square pixel |
| :---: | :---: |
| Pixel Number: | $352 \times 290$ pixels with $352 \times 288$ effective pixels |
| Optical Size: | 5.5 mm in diagonal |
| Sensitivity: | $9 \mathrm{~V} / \mathrm{lux} . \mathrm{s}$ |
| Spectrum Span | 400~1100 nm |
| Dark Current | $25 \mathrm{mV} / \mathrm{s} @ 25^{\circ} \mathrm{C}$ |
| Readout speed: | 10Mpixels/s |
| ADC: | On-chip 8-bit A/ D converter |
| Power supply: | 3.3 v or 5.0 v |
| Electronic shutter: | Full frame shutter |
| Color filter: | Bayer's |
| Package: | LCC-48 package |

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