ElecVision Inc.

CMOS Image Sensor EVS100K

Description

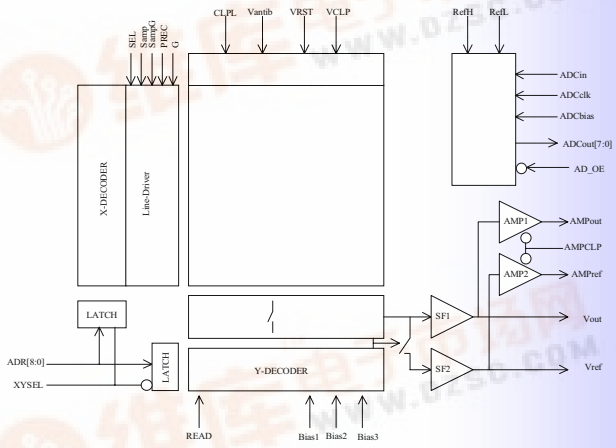
Asynchronous Random-access MOS Image Sensor ARAMIS EVS100K is a user-friendly CMOS integrated image sensor using a patented architecture developed by ElecVision in order to simplify its integration into computer-based products. Different from classic CCD image sensors or some newly introduced CMOS image 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 352x290 pixels with 352x288 effective pixels and an on-chip amplifier and ADC as well.

Besides, a wide range continuous full frame electronic shutter control ability (from 1us to 255ms) 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

- 352x288 effective pixels
- On-chip in-pixel analog frame-buffe
- Clock-less and X-Y addressed image readout
- On-chip integrated video amplifier
- On-chip 8-bit A/D converter
- Fit for 1/3" lens
- Low power dissipation (< 200mW)
- 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:	352x290 pixels with 352x288 effective pixels
Optical Size:	5.5mm in diagonal
Sensitivity:	9V/lux.s
Spectrum Span	400~1100 nm
Dark Current	25mV/s @25 °C
Readout speed:	10Mpixels/s
ADC:	On-chip 8-bit A/D converter
Power supply:	3.3v or 5.0v
Electronic shutter:	Full frame shutter
Color filter:	Bayer's
Package:	LCC-48 package

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