

Description

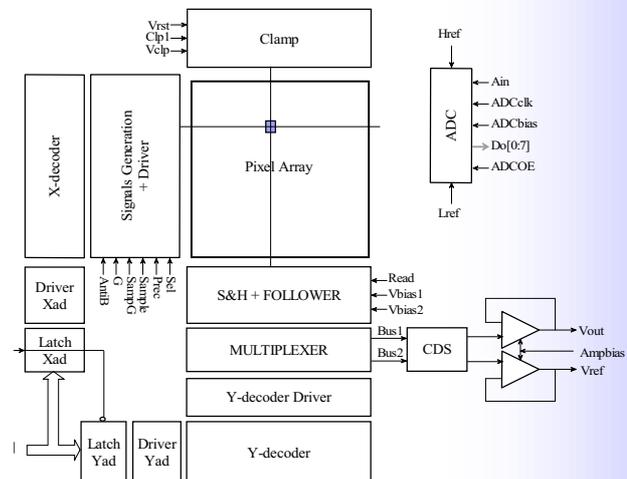
Asynchronous Random-access MOS Image Sensor ARAMIS EVS25K is a user-friendly CMOS integrated image sensor using a patented architecture developed by ElecVision in order to simplify its integration into computer-based products. Different from classic CCD image sensors or some newly introduced CMOS image sensors, ARAMIS EVS25K image sensor can provide a fully clock-less and X-Y address based image readout. This permits null or simple interface circuit to connect the sensor to a computer or DSP. Furthermore, it incorporates an array of 180x150 pixels with on-chip FPN elimination amplifier and Analog/digital converter.

The wide range continuous full frame electronic shutter control ability (from 1 μ s 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 etc.

Key Features

- 180x148 effective pixels
- (176x144 in colour version)
- On-chip in-pixel analog frame-buffer for motion smear-less image capture
- On-chip Fixed-Pattern-Noise Compensation
- Clock-less and X-Y address based image readout
- On-chip integrated video amplifier
- On-chip 8-bit A/D converter
- Low power dissipation (< 200mW)
- Wide range continuous full frame electronic shutter
- Internal Black reference

Block Diagram



Specification

Pixel Pitch:	12.1 μ m x 12.1 μ m CMOS active square pixel
Pixel Number:	180x150 pixels with 180x148 effective pixels in B/W version (176x144 in color version)
Optical Size:	2.2mm x 1.8mm
Sensitivity:	9V/lux.s @ B/W version 2V/lux.s @ color version
Spectrum Span	400~1100 nm
Dark Current	25~30mV/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