

EV76C560

# 1.3M Sapphire family

B&W and color CMOS sensor



#### **KEY FEATURES**

- 1.3 million pixels (1280 x 1024), 5.3 µm square pixels with micro-lens
- High speed: 60 fps at full resolution, low light CMOS sensor
- Global shutter for sharp images of fast moving objects
- Rolling shutter allowing true CDS and global reset for best SNR
- Multiple simultaneous regions of interest (4 separate windows)
- Linear dynamic range 62dB @ 25°C with possible HDR modes
- Low power consumption
- Output format 10 bits parallel plus synchronization
- Operating temperature (-30° to +65°C)
- Package: CLCC
- SPI control

## **TYPICAL APPLICATIONS**

- Intelligent cameras
- CCTV/IP surveillance cameras
- Industrial machine vision
- Barcode reading/scanners
- Biometric and medical imaging
- Automotive vision
- HD camcorders

## EV76C560

## Sapphire family 1.3M, B&W and color CMOS sensor

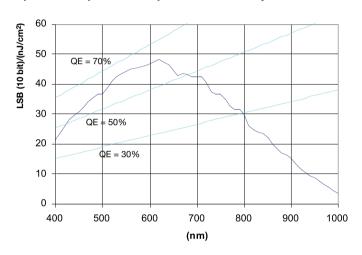


This 1.3 million pixel CMOS image sensor, designed on e2v's proprietary Eye-On-Si CMOS imaging technology, is ideal for diverse applications where superior performance is required. The innovative pixel design offers excellent performance in low-light conditions with both electronic rolling shutter and electronic global shutter, with a high-readout speed of 60 fps in full resolution. Novel industrial machine vision application features such as multi ROI and histogram output are embedded on-chip. Very low power consumption enables this device to be used in battery powered applications.

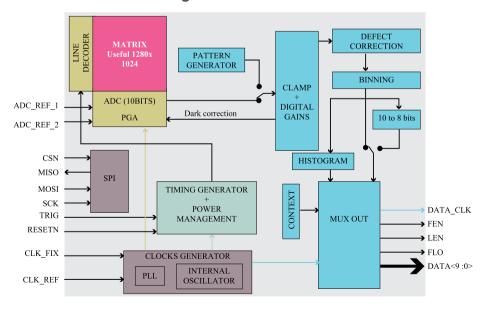
### Sensor characteristics

| SENSOR CHARACTERIST                        | TICS             |                                       |
|--|------------------|---------------------------------------|
| Resolution                                 | pixels           | 1280 (H) x 1024 (W)                   |
| Image size                                 | inches           | 1/1.8                                 |
| Pixel size (square)                        | μm               | 5.3 X 5.3                             |
| Aspect ratio                               |                  | 5/4                                   |
| Max frame rate                             | fps              | 60 @ full format<br>>100 @ VGA format |
| Pixel rate                                 | Mpixels/s        | 90 to 120                             |
| PIXEL PERFORMANCE                          |                  |                                       |
| Bit depth                                  | bits             | 10                                    |
| Dynamic range                              | dB               | 66 (linear)<br>>100 (HDR mode)        |
| SNR max                                    | dB               | 42                                    |
| Responsivity                               | LSB10/s (nJ/cm²) | 48                                    |
| MECHANICAL & ELECTRI                       | CAL INTERFACE    |                                       |
| Power supplies                             | V                | 3.3 & 1.8                             |
| Power consumption<br>Functional<br>Standby | mW<br>μW         | 200<br>180                            |

## Spectral response and quantum efficiency



## Sensor overview - Block diagram



Contact us online at:

