TELEDYNE e2v
Everywhereyoulook™
Part of the Teledyne Imaging Group

1.3 SAPPHIRE CMOS SENSOR FAMILY
EV76C560
B&W and color

Nothing Remains in the Dark

KEY BENEFITS

- 1.3 million pixels (1,024 (V) x 1,280 (H)), 5.3µm square pixels with micro-lens
- High speed: 60fps at full resolution, low-light CMOS sensor
- Global shutter for sharp images of fast moving objects
- Rolling shutter allowing true CDS and for global reset for best SNR
- Multiple simultaneous regions of interest (four 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

APPLICATIONS

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

ORDER CODES

- EV76C560ABT-EQV
  for monochrome product
- EV76C560ACT-EQV
  for Bayer (color) product
- For other CFA options
  please contact **Teledyne e2v**

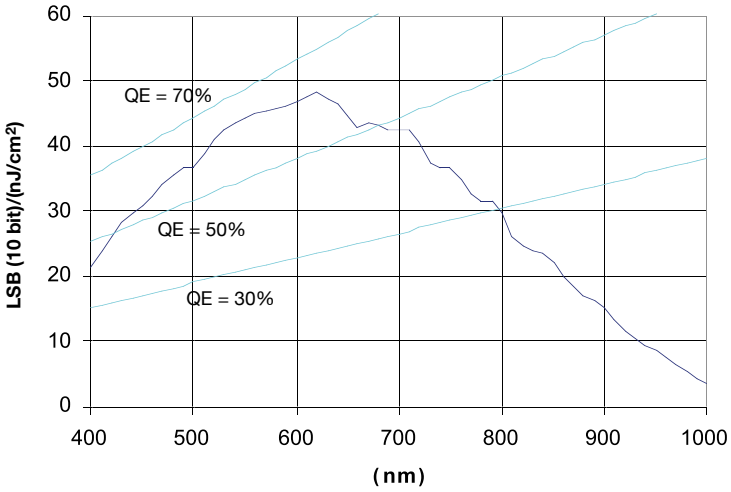
This 1.3 million pixel CMOS image sensor, designed on **Teledyne e2v's** proprietary Eye-On-Si CMOS imaging technology, is ideal for diverse applications where superior performance is required. The innovative pixel design offers excellent performance in low-light conditions with both electronic rolling shutter and electronic global shutter, with a high-readout speed of 60fps 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	
Resolution – pixels	1,024 (V) x 1,280 (H)
Image size – inches	1/1.8
Pixel size – µm	5.3 x 5.3
Aspect ratio	5:4
Max frame rate – fps	60 @ full / >100 @ VGA
Pixel rate – Mpixels/s	90 to 120

PIXEL PERFORMANCE	
Bit depth – bits	10
Dynamic range – dB	66 (linear) / >100 (HDR)
SNRmax – dB	42
Responsivity – LSB10/(nJ/cm²)	48

MECHANICAL & ELECTRICAL INTERFACE	
Power supplies – V	3.3 & 1.8
Power consumption Functional – mW Standby – µW	 200 180

SPECTRAL RESPONSE AND QUANTUM EFFICIENCY



SENSOR OVERVIEW