

NOTHING REMAINS IN THE DARK



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 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.

KEY BENEFITS

- 1.3 million pixels (1,024 (V) x 1,280 (H)),
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 for
global reset for best SNR
- Multiple simultaneous regions of interest
(four separate windows)
- Linear dynamic range 62 dB @ 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



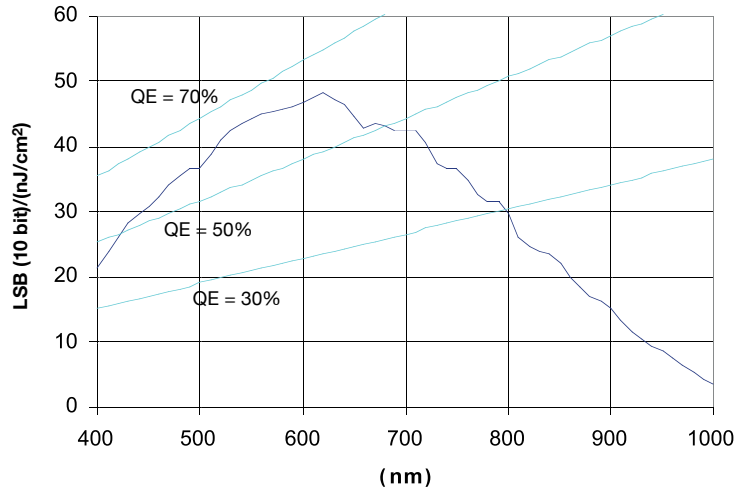
Sensor Characteristics

Resolution – pixels	1,024 (V) × 1,280(W)
Image size – inches	1/1.8
Pixel size – μm	5.3 × 5.3
Aspect ratio	5:4
Max frame rate – fps	60 @ full / >100 @ VGA
Pixel rate – Mpixels/s	90-120
PIXEL PERFORMANCE	
Bit depth – bits	10
Dynamic range – dB	66 (linear) / >100 (HDR)
SNRmax – dB	42
Responsivity – LSB10/(nJ/cm²)	48

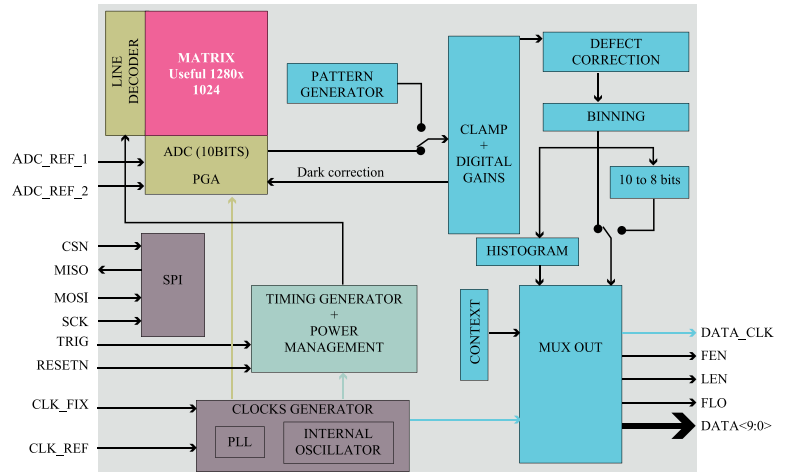
MECHANICAL & ELECTRICAL INTERFACE

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

SPECTRAL RESPONSE & QUANTUM EFFICIENCY



SENSOR OVERVIEW



ORDER CODES

MONO	EV76C560ABT-EQV
COLOR	EV76C560ACT-EQV

* For other CFA options please contact Teledyne e2v