

Part of the Teledyne Imaging Group

LINCE11M CMOS SENSOR

Lince11M, the World's Fastest >10MP Global Shutter Sensor



Advanced illumination systems have become a crucial part of accurately inspecting new and smaller defects. They use high-power LEDs which feature multiple wavelengths and can also inspect objects from multiple angles. **Teledyne e2v's** Lince11M image sensor is ideal for such systems, as it combines both high-speed and high-resolution, helping to improve yields without sacrificing on production throughput.

Outside of the factory floor, Lince11M enables customers to freeze high-speed motion, in larger volumes than any other off-the-shelf sensor. That feature also allows complex scenes with multiple objects to be imaged.

SENSOR FEATURES

High resolution 11MP	High speed Up to 6.8 gigapixels per second	Standard optics APS-like to F-mount	NIR sensitivity 22% QE @850nm	Low power 3.6W
CUSTOMER BENEF	ITS			
Long distance imaging	Wide angle imaging	Lower cost with less cameras, optics, cables	Strobe more lights for multispectral or multi-field imaging	Affordable optics
	Isotropic MTF for better defect classification	Low heat generation	Relax trigger constraints	

FIND OUT MORE!

SENSOR CHARACTERISTICS

	LINCE11M		
Pixel type/pitch	Global shutter/6µm		
Array size/aspect ratio/format	4,480 (H) x 2,496 (V) - 16/9 - APS-like		
Color filter	Monochrome		
Features	Windowing - flipping - temperature sensor - trigger management for ultra low trigger to exposure latency and jitter		
Maximum QE	60%		
Dynamic range	60 dB		
Temporal read noise	45e -		
Maximum frame rate @10 bit	615fps		
Bit depth	10		
Power consumption	3.6W @max frame rate		

KEY ELEMENTS

- » 11.2 Megapixel resolution
- » 6µm CMOS global shutter pixel
- » Up to 615fps @full resolution 10 bits
- » 30.8mm diagonal @full resolution
- » Anti-reflective coated glass
- » 50 x 46mm² ceramic µPGA package
- » Power consumption: 3.6W @full speed & full resolution

EMBEDDED FEATURES

- » Windowing to increase frame rate
- » Flipping
- » Two external trigger modes

TYPICAL APPLICATIONS

- » High-speed industrial inspection
 - > Semiconductors (wafer, flat panel)
 - > Electronics (ball grid, PCB)
- » Motion capture
- » Slow motion imaging
 - > Research
 - Ballistic
 - Crash tests