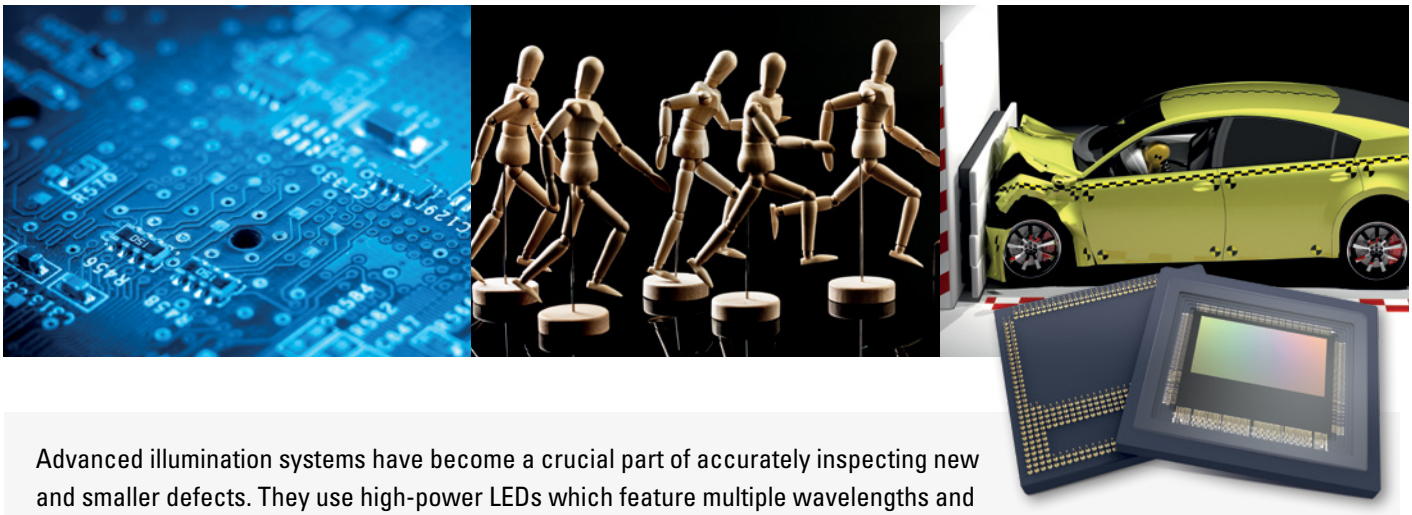
LINCE 11M, THE WORLD'S FASTEST >10MP GLOBAL SHUTTER SENSOR



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 @850 nm	**Low power** 3.6W

CUSTOMER BENEFITS

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	

Sensor Characteristics

	LINCE11M
Pixel type/pitch	Global shutter/6 µm
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	615 fps
Bit depth	10
Power consumption	3.6W @max frame rate

KEY BENEFITS

- 11.2 Megapixel resolution
- 6 µm CMOS global shutter pixel
- Up to 615 fps @full resolution 10 bits
- 30.8 mm 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