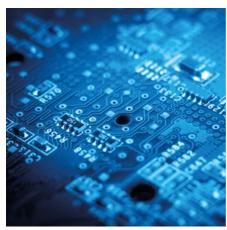


Part of the Teledyne Imaging Group

# 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 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/6µm 4.480 (H) x 2.496 (V) - 16/9 - APS-like Array size/aspect ratio/format Color filter Monochrome Windowing - flipping - temperature sensor - trigger management **Features** 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 10 Bit depth 3.6W @max frame rate Power consumption

## **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