



LN130BSI

High-Sensitivity Backside-Illuminated CMOS Image Sensor

The MinVision Series CMOS image sensor excels in ultra low-light imaging with low read-out noise and high dynamic range. It is ideal for a diverse range of applications, including:

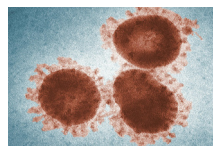
- Advanced Surveillance and Security
- Intelligent Traffic Systems
- Industrial Inspection and Automation
- Scientific and Biomedical Imaging
- Semiconductor / Wafer Inspection
- Astronomy and Deep Space Imaging

This 1" sensor features 1.3M 9.5µm backside-illuminated pixels with proprietary HDR technology at a 1280 x 1024 resolution. The LN130BSI achieves over 93% Quantum Efficiency at 560nm, delivering clear images in extreme low-light conditions down to 0.0003lx. Supporting both rolling and global shutter modes, it offers unparalleled versatility. It delivers an impressive dynamic range of over 93dB at 75fps in rolling shutter mode.

KEY FEATURES

- Low Read-Out Noise
- High Dynamic Range
- Backside-Illuminated
- Rolling Shutter

APPLICATIONS



Scientific and Biomedical Imaging



Semiconductor / Wafer Inspection



Advanced Surveillance and Security



Intelligent Traffic Systems



Astronomy and Deep Space Imaging



Industrial Inspection and Automation

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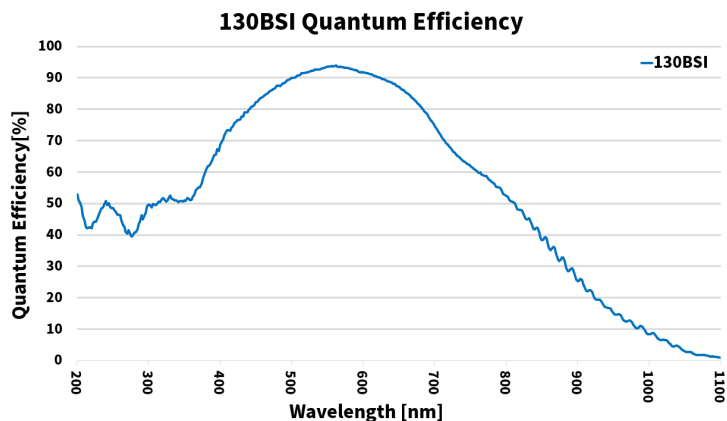
SPECIFICATIONS

LN130BSI	
Resolution [H×V]	1280 (H)×1024 (V)
Pixel Size [H×V]	9.5 μm×9.5 μm
Optical Format	1" (12.16mm * 9.73mm)
Shutter Mode	Rolling Shutter
Max Frame Rate	75 fps
Quantum Efficiency	> 93%@560nm
Read Noise	< 1.8 e ⁻
Full Well Capacity	> 82k e ⁻
Dynamic Range	> 93 dB
Dark Current	< 11e ⁻ /pixel/sec @Room Temperature
ADC Resolution	14 bit
Output	4-lane LVDS

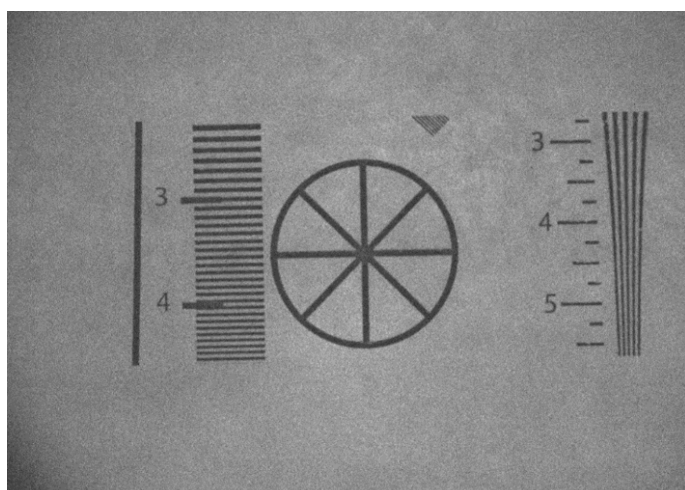
Backside-Illuminated

QE > 93% @560nm

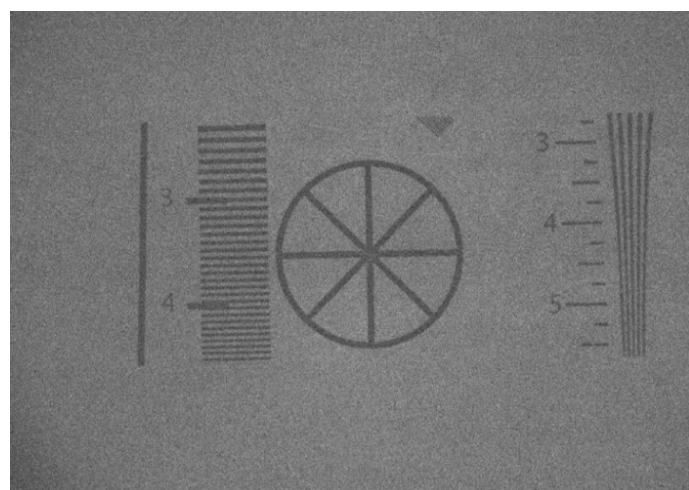
Read Noise < 1.8e⁻



LOW-LIGHT IMAGING



0.001 lx, 1/20s (50ms) f/2.8



0.0003 lx, 1/20s (50ms) f/2.8