

Low cost, high performance CMOS imaging technology for scanning applications

TDI scanning imaging

- Very high dynamic range(1:1E6)
- Low noise, bad pixel cancellation
- High MTF performance
- Above parameters confirmed with CNES (Fr).
- Vibration corrections
- Patent filed and classified as state secret by French MOD

Car speeding detection

- Cheap system, no flash, no radar and no high sensitive 2D sensor
- Speed measurement and car recognition on same acquisition with single TDI sensor.
- Suitable as well for trajectory control and red light crossing detection
- Speed measuring error<0.2km/h
- Patent filed

High resolution inspection

- Measuring details < 100nm
- Fast, one pass scanning capture
- normal exposure conditions
- In-track build in
- full wafer-size inspection
- Patent to be filed with customer

2D CCD imaging TDI

- Off-track imaging (e.g. drones) 2 dimensional CCD operation can correct for large displacements of scene.
- Patent filed

Low Cost

- 110nm CMOS process + 3.3V
- 3 additional masks b/w sensor
- 2 additional masks for color (CMOS FAB compatible)
- Cheap process install due to device optimization only
- FAB identified

Markets

- 6 different markets are identified
- all 6 represent more than 1B\$
- A combination of the 4 patents as described above is required.
- more information available by mail

State of the art

- Development plan of 1.5 year including first product
- Demonstrator in progress
- CMOS PDK available from FAB
- Device dimensions to optimize depending on customer specs.

SemiConsultor

- 1 person company
- 20+ years in micro-electronics device & process development
- 7 owned patents (2 NVM, 1 HV, 3 imaging, 1 car speeding)
- Specialized in low cost device options in CMOS