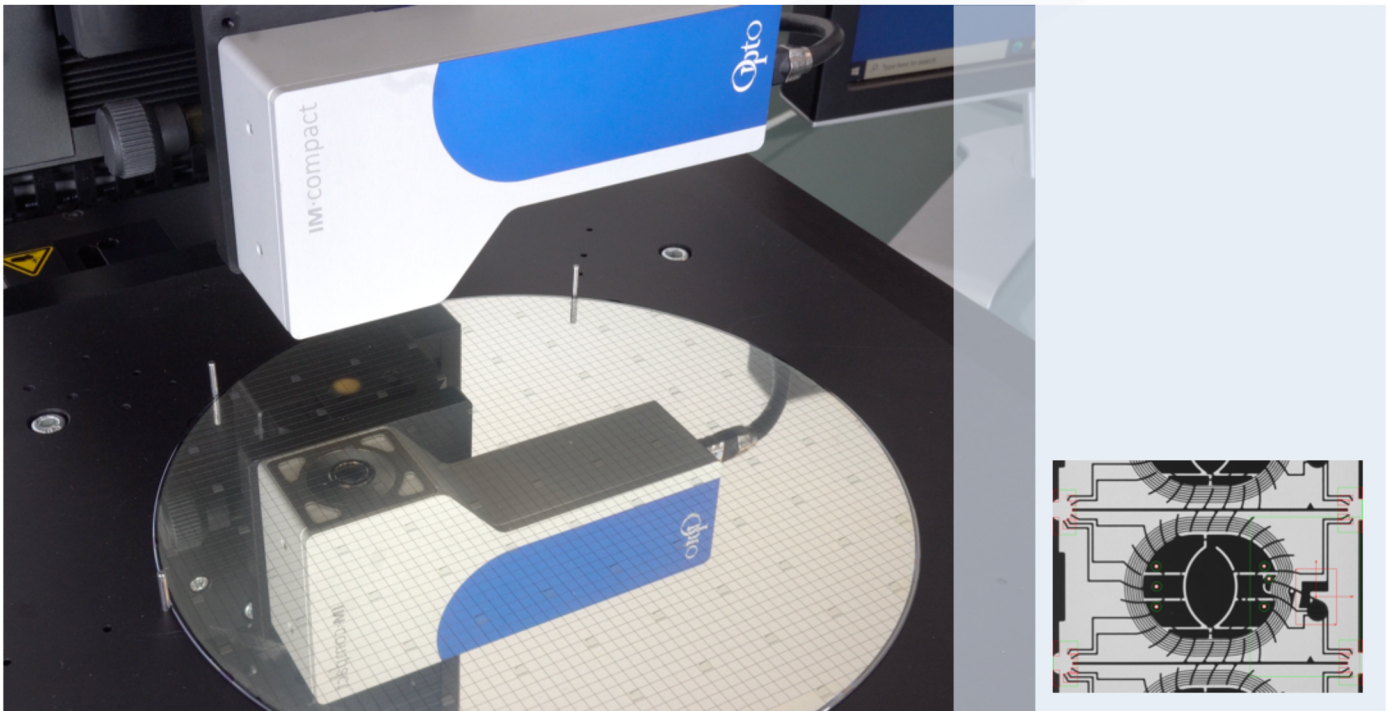




Wafer and PCB Control with Opto's 'Machine Vision Microscopes'



Customer Task:

- Rework, failure analysis and documentation
- Optical quality control of IC's, FPGA's, BGA's
- Single-sided, double-sided, or multilayer PCB inspection.
- Finding cracks, short circuits, defect electrical connections, bridges
- Optical post bond inspection or post reflow inspection
- Automatic pin counts, pin distance control, components identification
- Fast image acquisition with highest resolution
- Finding irregularities in wafer coating, impurities, cracks or misalignment anomalies
- Identifying contaminations, particles, scratches, or structure analysis

Advantage for customer:

- Pure all in one digital microscope
- More compact than regular microscopes
- Highest image quality with good color repeatability
- Optimized for mobile use
- Reliable Image Data
- Highest Price – Quality ration
- Software support

Solution:

- Different Imaging Modules like compact M, linea XL available
- Monochrome and color version
- Application optimized Optoelectronics
- Easy to use and free OptoViewer 2.0 software
- Image Processing Plug Ins available
- Different SDK and toolkits for machine Integration available
- USB 3.0 / GigE available – Plug and Play

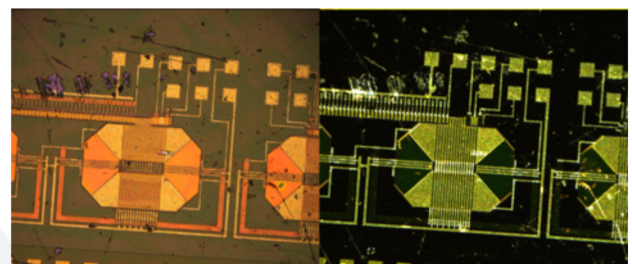


Fig. 1: Defect identification using different illumination concepts – bright-field (left) vs. dark field (right)