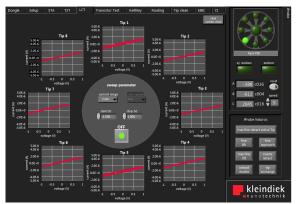


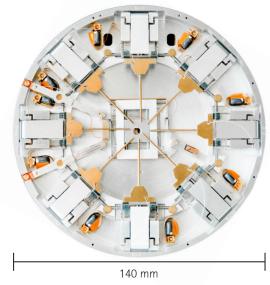
| kleindiek Current Imaging for Visualizing Leakages

During Current Imaging, each of the eight probes can be biased and scanned over the sample surface, allowing for the acquisition of current flow images (CI) with sub-pA resolution. In this example, the correlation of SEM and Cl is used to locate leakages in 22 nm SRAM devices.[^]

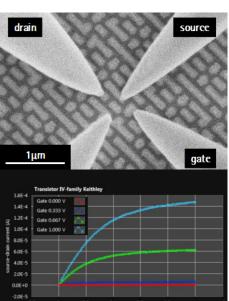


LCT

The Live Contact Tester serves as an 'electric eye' - it visualizes the contact between tip and substrate.

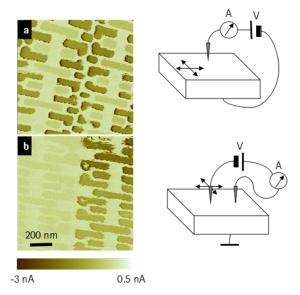


Prober Shuttle with eight probes



Failure Localization

Using the probes and with the help of the Advanced Probing Tools the needles can be landed on the contacts. The resulting current-voltage curves (IVCs) yield insight into the device's condition.

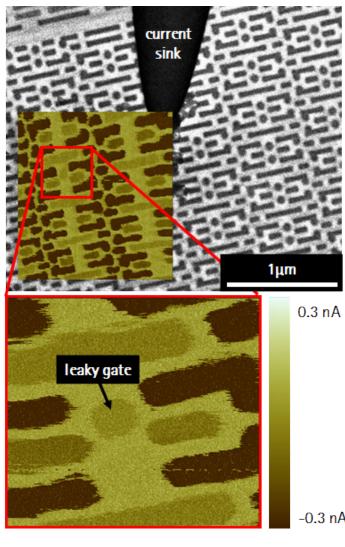


Current paths

The CI module allows flexibility in defining the current path. In combination with the variation in the current source's bias voltage, this feature can be used to differentiate structures on the sample as well as for identifying faults.

Leaky Gate

With the help of the CI technique, a leaky gate could be identified:



Further information

• Find our more on our website: www.klendiek.com