

# SCANNING ELECTRON MICROSCOPE (SEM)

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MANUFACTURER : Zeiss

MODEL : LEO 1560

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## Analysis

- Resolution: 5nm at 0.2 kV and at 2mm WD
  - 2.5nm at 1 kV and at 2mm WD
  - 1.5nm at 10 kV and at 2mm WD
  - 1nm at 20 kV and at 2mm WD
- Magnification: 20X to 900 000X
- Probe current: 4pA to 10nA
- Electron gun: Thermal field emission
- Detectors: In-Lens: Annular type
  - External: E-T Type mounted in chamber
  - Robinson Backscattered Electron Detector
- Accelerating Voltage: 200V to 30kV
- Specimen Stage: Type: 6 axis fully Eucentric
  - Movements: X = 153mm
  - Y = 153mm
  - Z' = 10mm
  - Z = 43mm
  - Tilt : -15° to 65°
  - Rotation : 360° continuous
- Specimen Exchange Airlock Size : 210mm x 50mm
- Specimen Chamber: Inside diameter: 520mm
  - Height:: 300mm

## Applications

- Surface characterization
- Elemental chemical analysis

## Characteristics

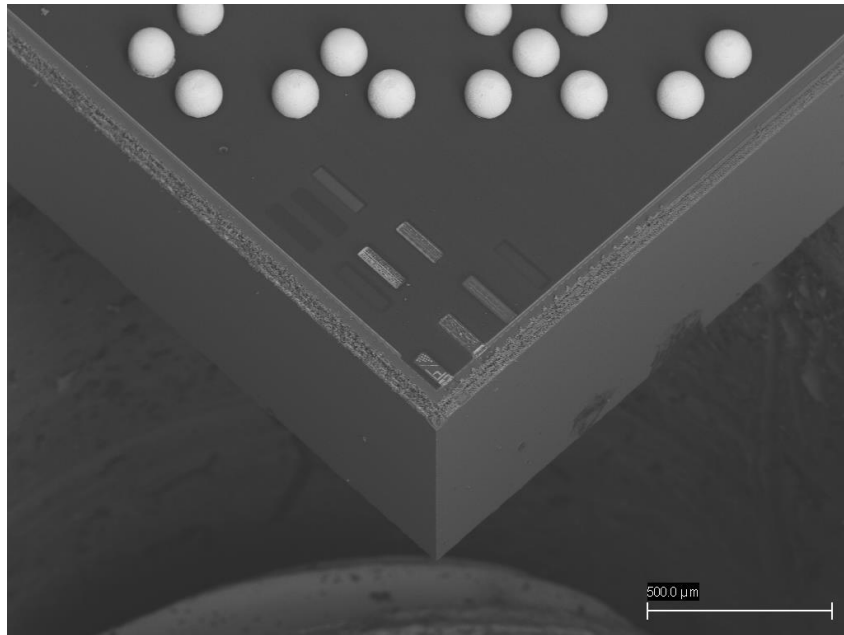
- EDS Detector: Si(Li) (30mm<sup>2</sup>) Prism 2000 with Imix acquisition system allowing Be detection

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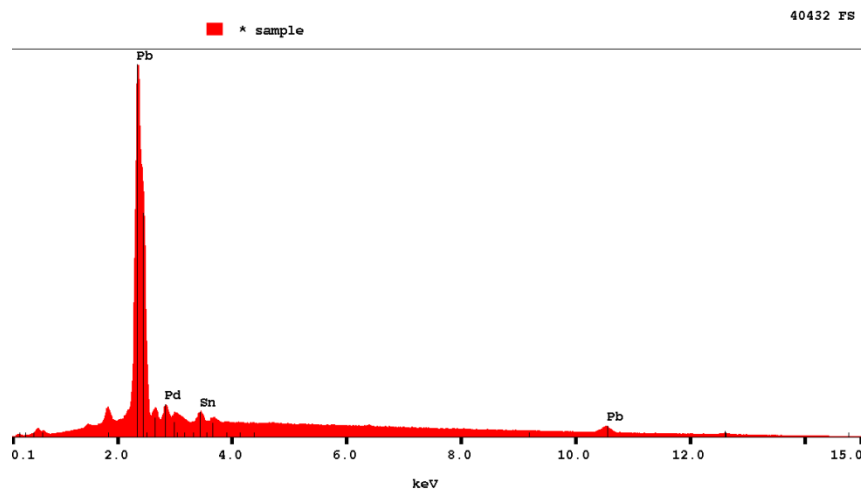
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## Examples



SEM image of the corner of a microchip



EDS analysis of a solder ball