Scanning Electron Microscopy (SEM)

innovations
for high
performance
microelectronics

Technical Parameters

SEM System:
Hitachi S-4500
EDX Detector Noran System Six

Primary Beam: Electrons 5 - 25 kV
Signal Detected:

- Secondary electrons (SE, BSE Detectors)
- X-rays (EDX)

Elements Detected: B-U (EDX)
Lateral Resolution: SEM: 2.0 nm @ 25 kV
2.5 nm @ 1 kV
EDX:≥ 3 µm
Depth Resolution: EDX 0.5 – 3 µm
Detection Limits: EDX: 0.1- 1 at%

Application areas

- High resolution SEM images
- Elemental analysis by EDX (point analysis, line scan and mapping

Contact person

Dr. Ioan Costina

Phone: +49 335 5625 370

Fax: +49 335 5625 327

Email: costina@ihp-microelectronics.com