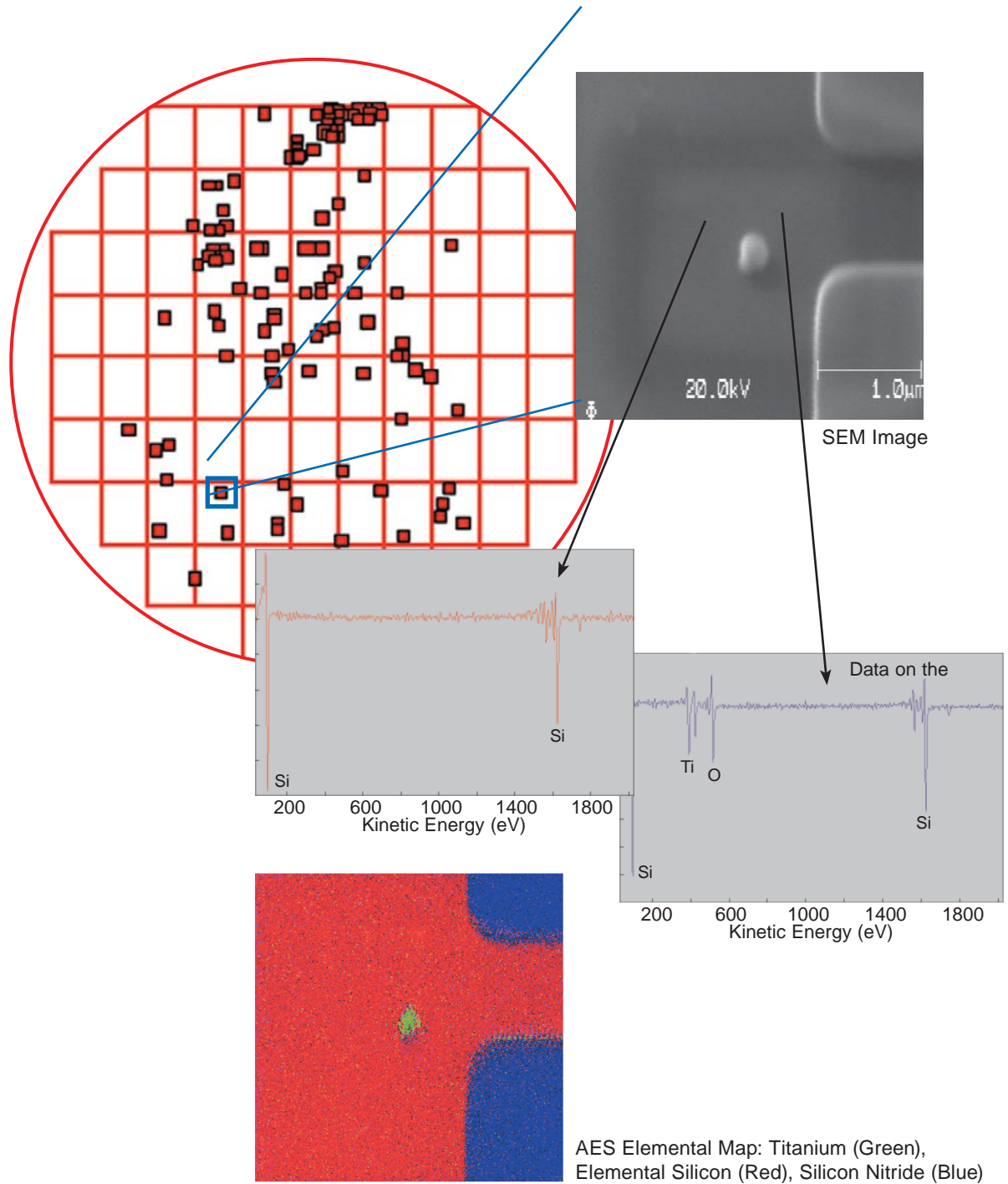




## AN 340

## Fast Elemental Identification of Submicron Defects by AES Leads to Yield Enhancement

May 4, 2007 (Version 3.0)



## Analytical Performance

- detects all elements above He (detection limits: 0.1-1.0% atomic concentration)
- achieves a spatial resolution of <30 nm
- achieves a depth resolution of 1 to 5 nm
- enables secondary electron imaging and AES elemental mapping
- Focused Ion Beam (FIB) capability allows analysis of buried defects

## 200 mm Wafer Handling System

- accepts defect coordinate locations from Optical Defect Detection (ODD) tools (including KLA™, Tencor® and INSPEX™)
- analyzes the entire 200 mm wafer
- features a true five-axis stage which operates in a clean ultrahigh vacuum (UHV) environment
- is designed for high positional accuracy, repeatability, reliability

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