

# SmartSEM®: Image Navigation

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## Introduction

Productivity and ease of use are important concerns for all users of analytical instruments. The SEM is sometimes limited by the time needed to find small features on a large specimen. Examples include components on printed circuit boards, crystals within geological thin sections, and characters on documents.

In addition, users can often identify features in a light microscope or photograph and then find it challenging to locate the region of interest in the SEM.

## Image Navigation

This new feature of SmartSEM®, fifth generation SEM control graphical user interface, overcomes these limitations by using images from other sources to improve feature location in the SEM.

Images can be imported from:

- A live, or stored, SEM image
- A digital camera, webcam or light microscope
- A CAD package
- The optional Stubscope for EVO microscopes

## Application areas

- Printed circuit boards
- Documents
- Engineered components
- Fabrics

## Customer benefit

- Increased productivity
- Accuracy in locating individual features amongst a collection of many.
- Improved communication of results to clients



We make it visible.

Fig. 1:  
Phone card

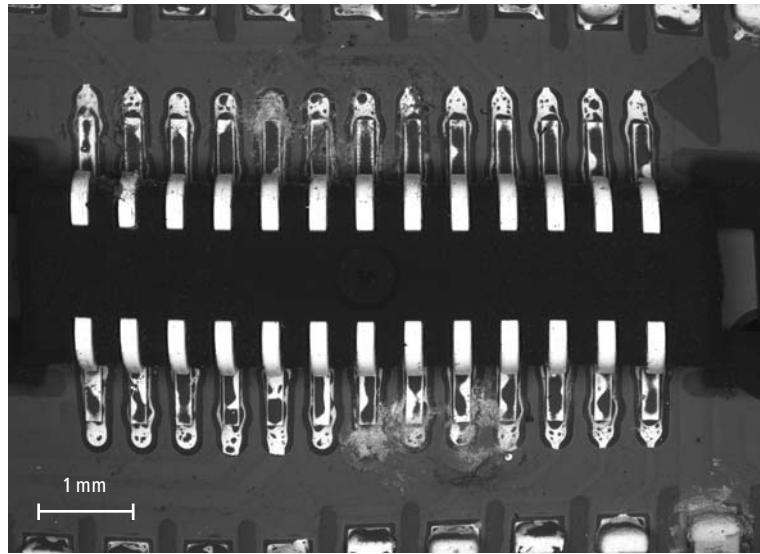


Fig. 2:  
Sandstone thin section at  
high magnification

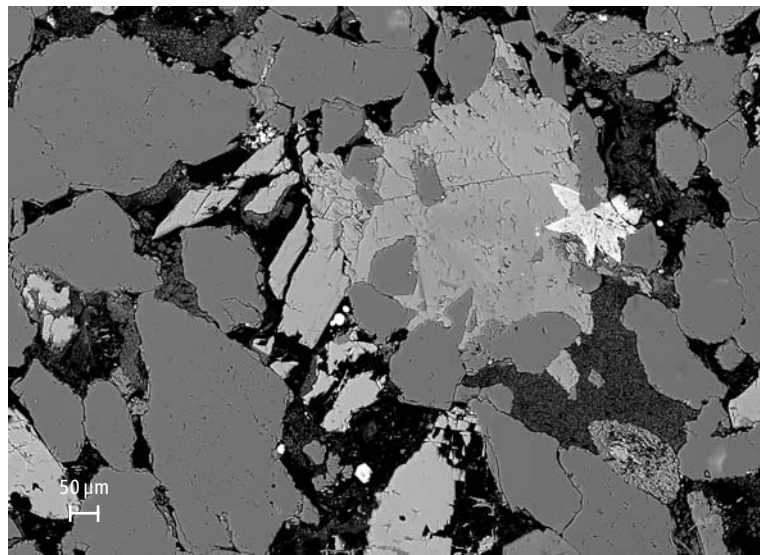
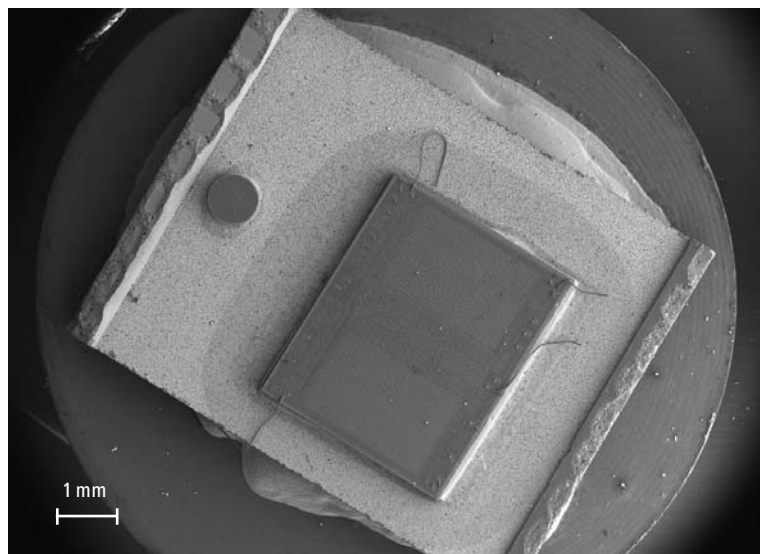


Fig. 3:  
Individual specimen  
mounted on a stub



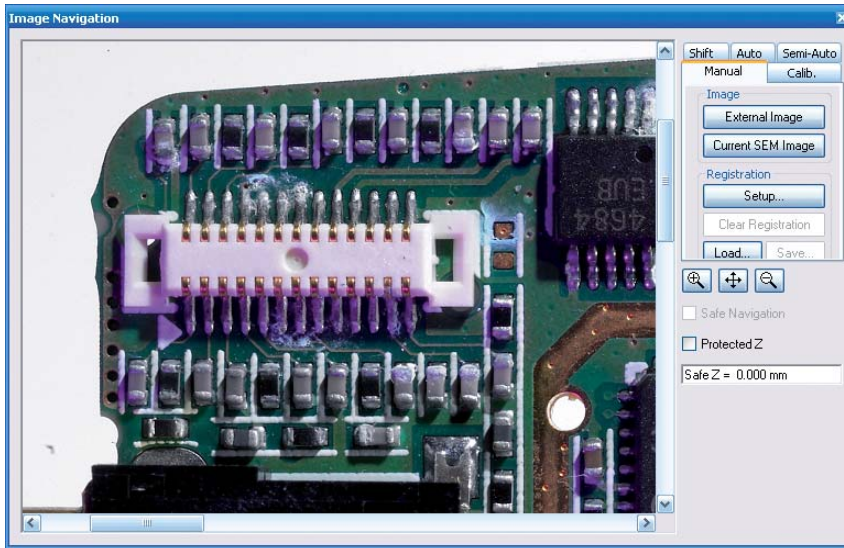


Fig. 4:  
Phone card photograph  
within Image Navigation  
panel

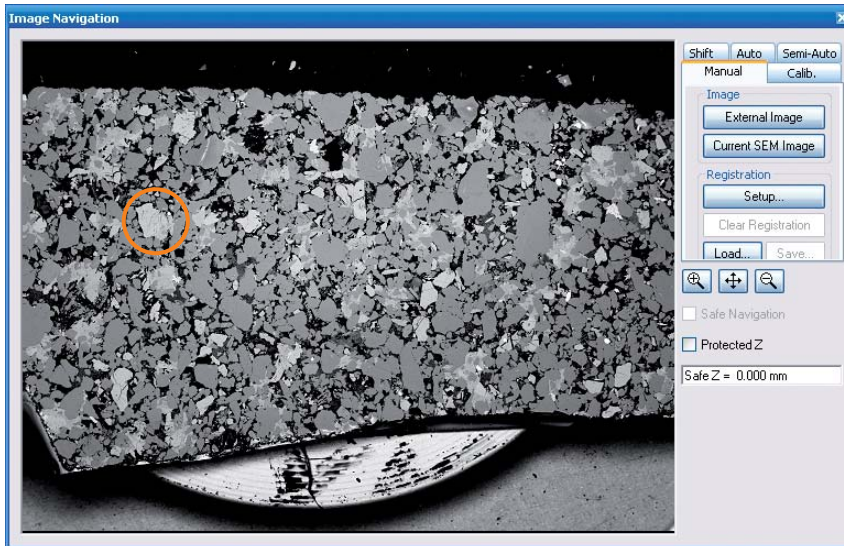


Fig. 5:  
Sandstone thin section  
low magnification SEM  
within Image Navigation  
panel



Fig. 6:  
Specimen carousel  
photograph within the  
Image Navigation panel

## Applicability

Image Navigation is a feature of SmartSEM® Version 5.3, NTS's fifth generation SEM user interface and can be fitted to the following microscope families:

- CrossBeam® series
- EVO® MA and LS series
- SUPRA® series
- ULTRA and ULTRA PLUS



AURIGA® CrossBeam® series



EVO® MA and LS series



SUPRA® series



ULTRA PLUS

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