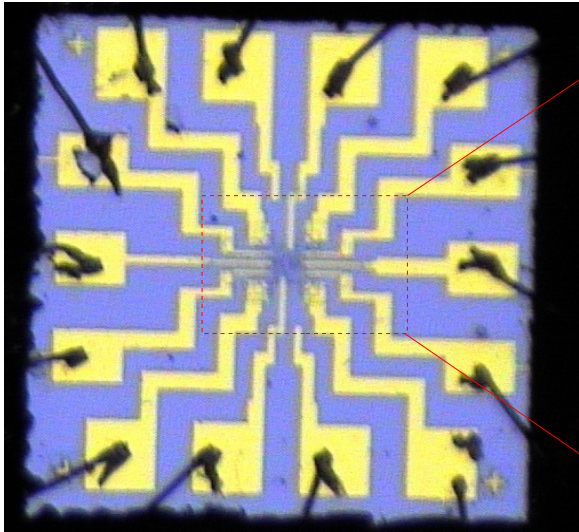
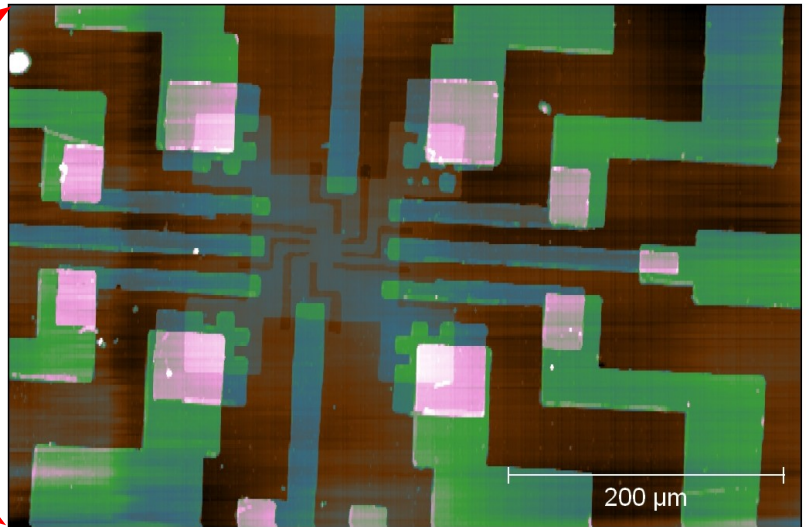


## SmartSPM 1000 - Performance Examples

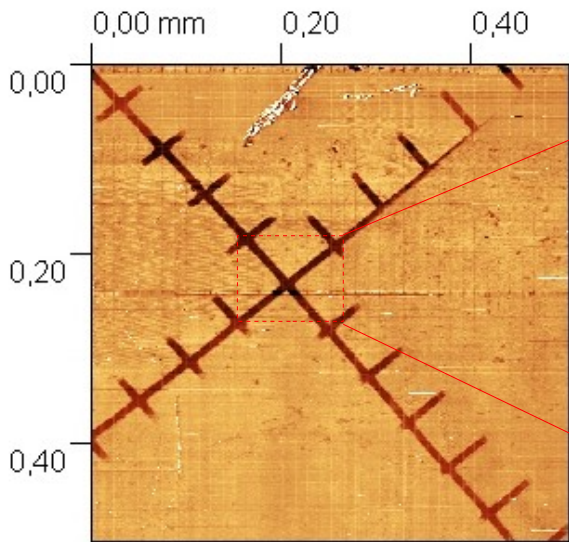
### Ultra Large Scale AFM Imaging by Stepper Motors



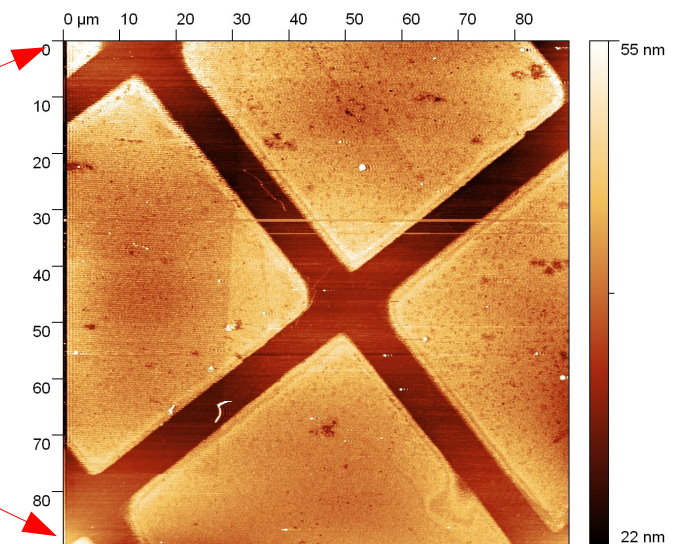
Optical image 1800 x 1800  $\mu\text{m}$



AFM topography image 400 x 500  $\mu\text{m}$ . X & Y - axis by stepper motors, Z - axis by piezo tracking. Imaged by one single scan.

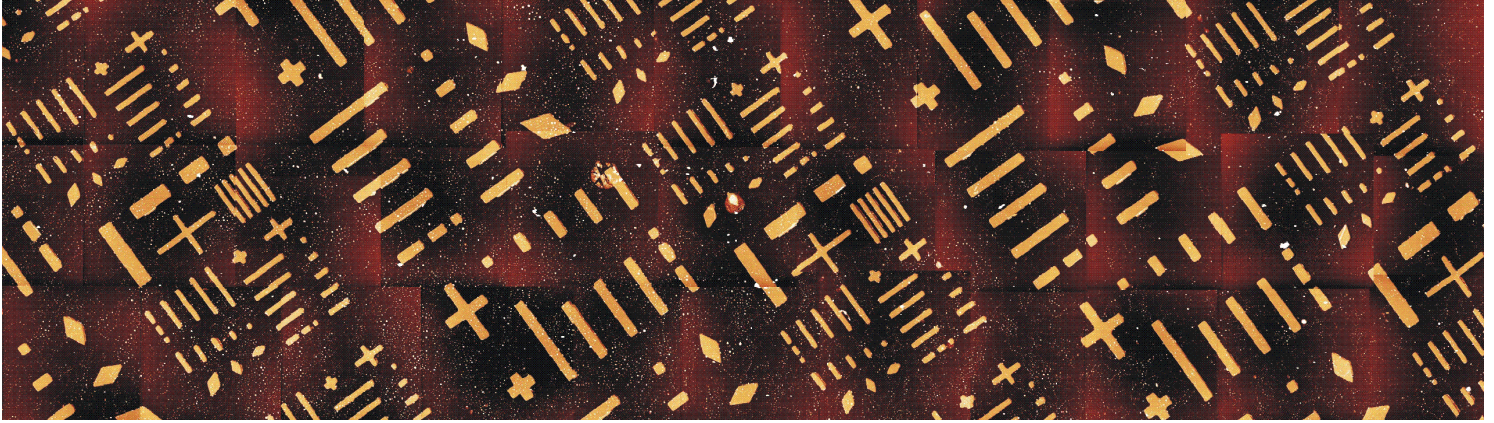


Lateral force AFM image 500 x 500  $\mu\text{m}$ , 1024x512 points, X & Y - axis by stepper motors, Z - axis by piezo tracking. Imaged by one single scan.

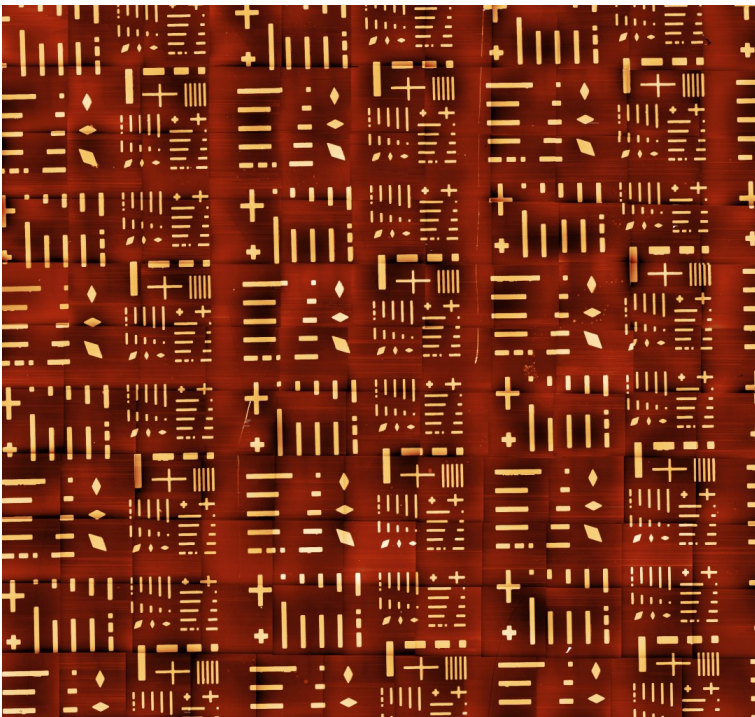


AFM topography image 90 x 90  $\mu\text{m}$  of the central area. Contact mode. Scan size 1024x1024 points.

## **SmartSPM 1000 - Performance Examples** Automated Ultra Large Scale AFM Imaging Using Stitching



990 x 270  $\mu\text{m}$ , ultra large scale and high-resolution AFM image. 27 images of 100 x 100  $\mu\text{m}$  were obtained through one automated scanning process including scan and repositioning sequence. Afterwards all images were stitched together in semi-automatic mode.



1000 x 1000  $\mu\text{m}$ , ultra large scale and high-resolution AFM image.

100 of 100 x 100  $\mu\text{m}$  images were obtained through one automated scanning process including scan and repositioning sequence. Afterwards all images were stitched together in semi-automatic mode.