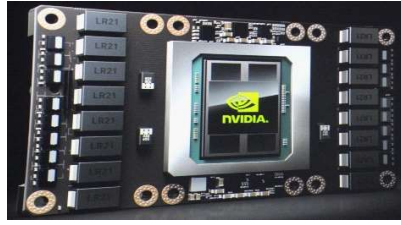


gbs Contrast Enhanced White Light Interferometry

GPGPU's can process images much faster than conventional PC's



+



=

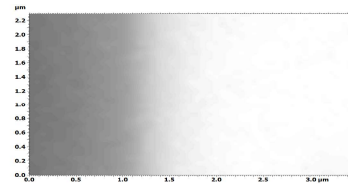
higher speed + improved results

advanced algorithms can be used for the image processing based on the higher performance of graphical boards

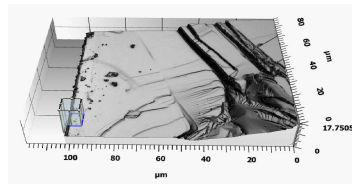
smartWLI resolves details below the rayleigh limit



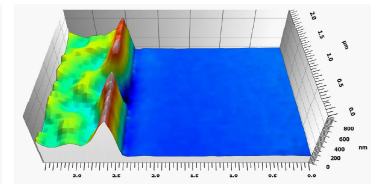
SEM (scanning electron microscopy)



100x objective / similar area as SEM



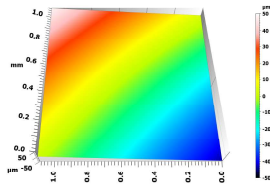
3d image smartWLI 100x full scan



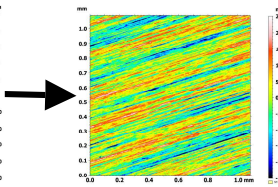
WLI scan / similar area as SEM

smartWLI needs less contrast and provides more object information as microscopic images

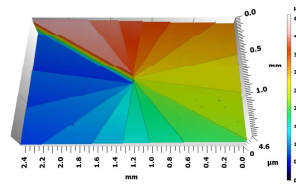
EPSI (extended phase shift interferometry) for sub nanometer resolution



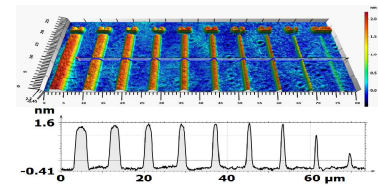
inclined surface of a lens



surface after form filtering



test structure with small steps



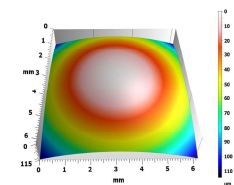
lines down to a thickness of 0.1 μm

EPSI provides sub nanometer resolution on an extended scanning range

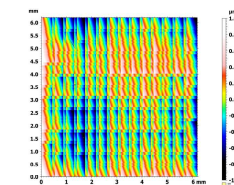
smartSTITCH eliminates the limitation of mechanical positioning systems



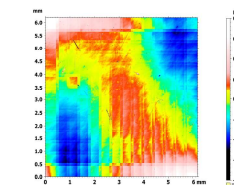
historical magnifying glass



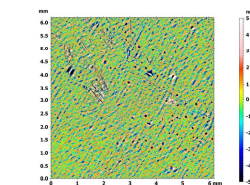
3D scan



full z error of the xy-stage



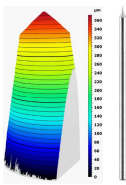
z correction
(MountainsMap)



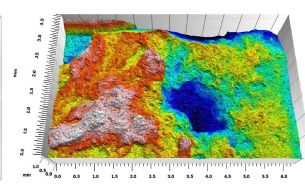
z and angle correction
smartSTITCH (GBS)

algorithms for z and angle correction allow the evaluation of nano form deviations and nano structures in larger areas

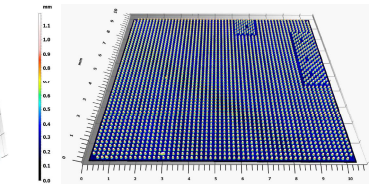
measurements of strongly inclined large objects



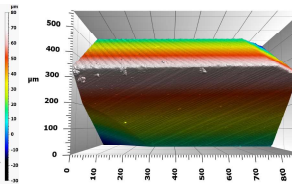
needle tip



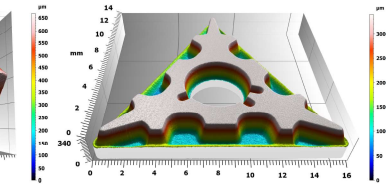
crack area



solder points



cutting edge, end mill



insert