

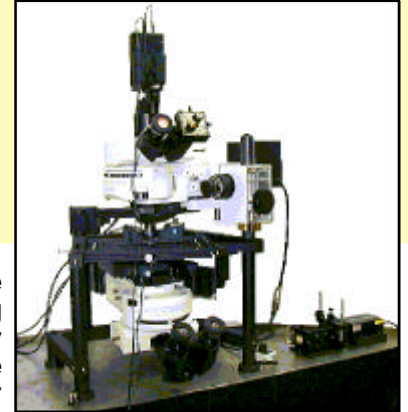
January 2003

A Nanonics

Microscopy

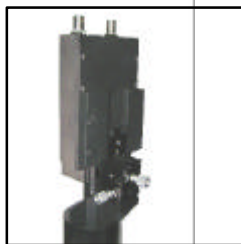
Solution

# The Nanonics Confocal System



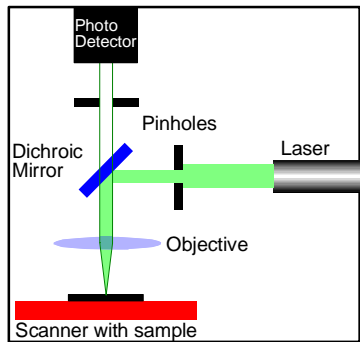
*The Nanonics Confocal System integrated together with the Nanonics Dual Microscope*

In the confocal setup designed by Nanonics, the illumination beam is kept stable and the scanning necessary for confocal imaging is accomplished by a piezo-scanner. Both the scanner control and the data acquisition are carried out by a special controller with the appropriate software.



*The APD Mounted on an XY stage*

The Photodetector can be aligned to achieve a maximum signal as it is mounted XY stage.  
Travel = 9.5mm  
Sensitivity = 1 micron

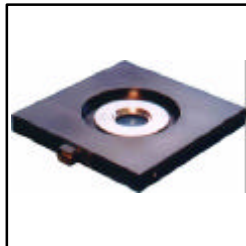


*Schematic of the Nanonics Confocal System*



*An optical fiber leading into the eyepiece attachment*

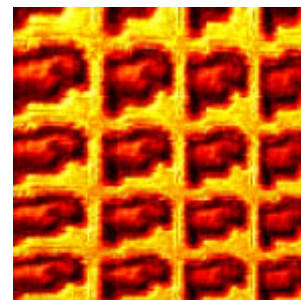
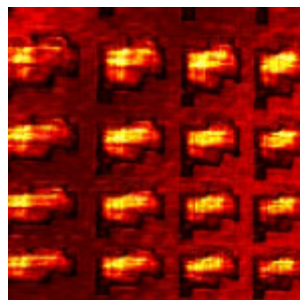
An optical fiber from the laser acts as both a transmission mechanism and pinhole. A chuck holds the optical fiber stable in the XY stage of the eye piece attachment.  
Travel = 3.2mm  
Sensitivity = 1 micron



*The Nanonics 3D Flat Scanner*

Using a piezo scanner to move the sample instead of a beams scanner ensures, that no optical artifacts are measured (caused by aberrations in the microscope optics).

Two 60 micron confocal images of CMOS pixels taken at different focal planes on the substrate. It is clearly seen, that depending on the focal point, different features are highlighted



NANONICS IMAGING LTD.