

# Scanning laser Imaging Scope



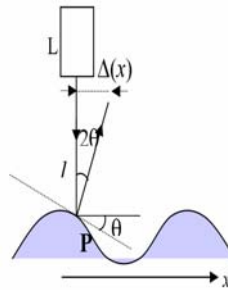
Core System

Core System Co.,Ltd.

## Basic concept and schematic diagram of 3-D surface profiler



Core system  
Scanning Laser Line Profiler & Imaging Scope



Assumption:  $\theta \ll 1$

$$\frac{df(x)}{dx} = \tan\theta \approx \theta \quad \text{at point P}$$

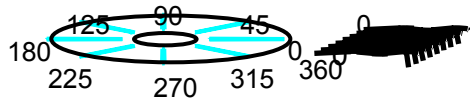
$$\Delta = 20l$$

$$S: \int \alpha dx \Delta(x) = \int dx \theta(x) = f(x)$$

$$\alpha = 1/(2l)$$

R.Shinozaki et al., APPLIED OPTICS: Vol. 43, No. 21, (July) 2004, pp.4157-4163.

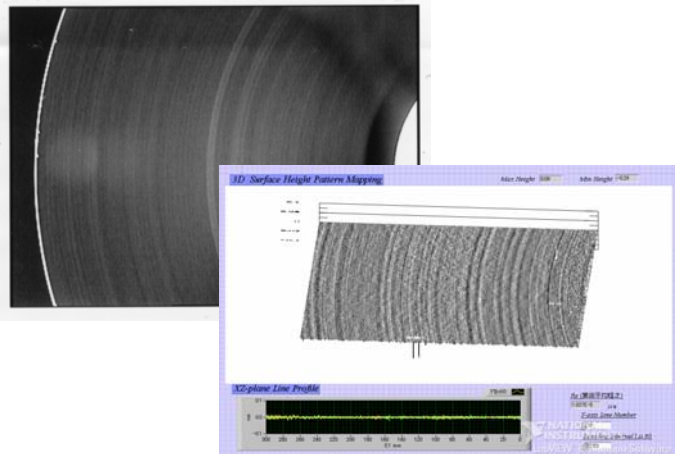
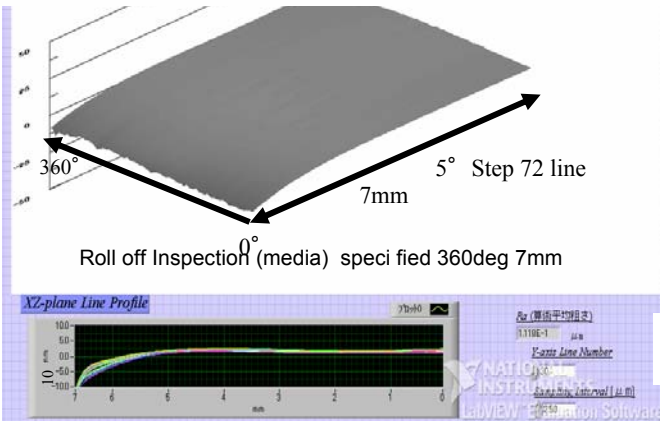
## The analysis of the data in roll-off mode



## The analysis of the data in surface mode



## Summary data mode



**AVI PRECISION ENGINEERING PTE LTD**

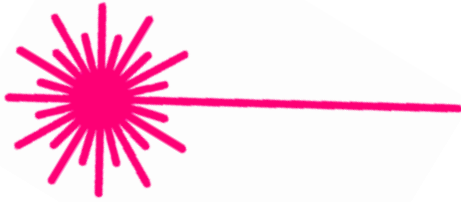
1, KALLANG SECTOR #04-03, SINGAPORE 349276. TEL: 65 67483866 FAX: 65 67484810

Email: avipre@avipre.com.sg

Website: <http://www.avipre.com>

Company Reg No: 199300584 M

Skype: avipre



# CSM-02



Core System

Core System Co., Ltd.

## Sample : IC Pattern

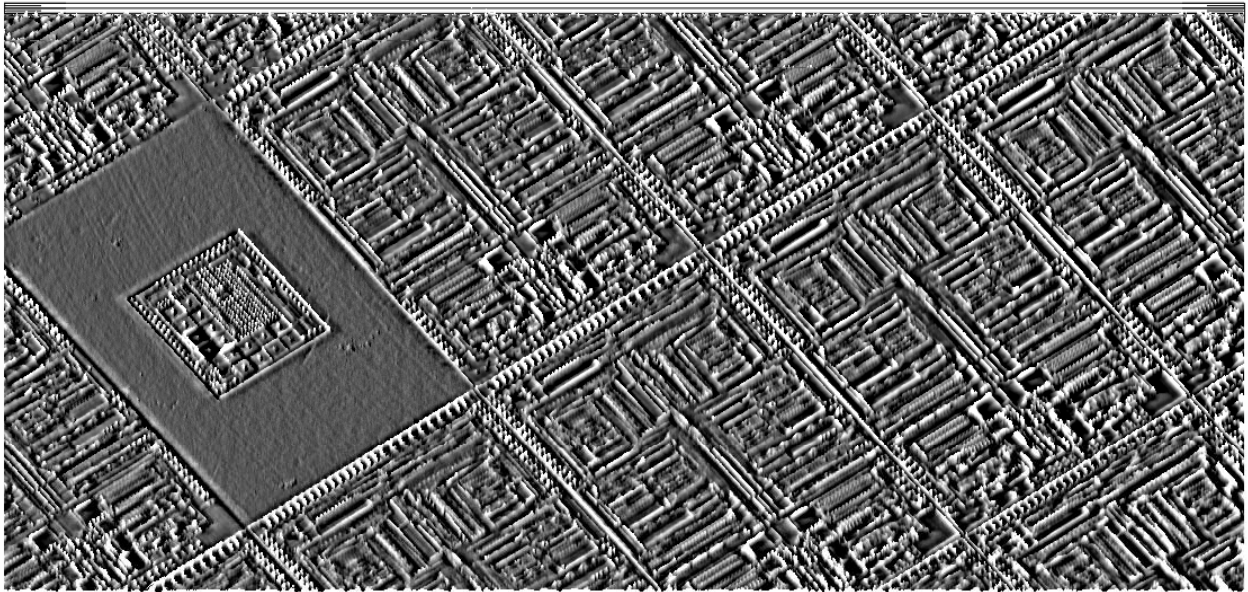
Scanning Particle Surface Imaging Scope

Max Height 71.31

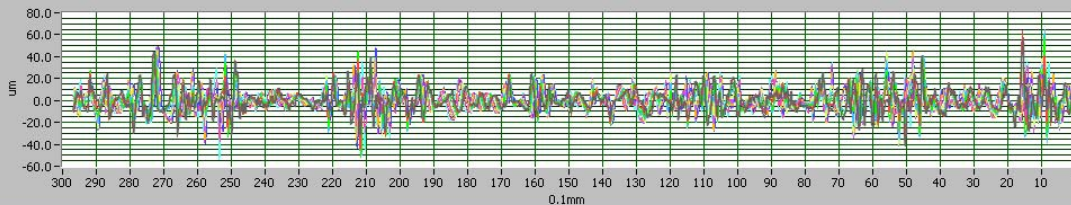
Min Height -65.36

collect A number 1

collect B number 3 12



XZ-plane Line Profile



plotA0

Ra

NaN um

Y-axis Line Number

10

Sampling Interval (um)

0.00

file D:\MyDoc\01005.txt

CoreSystem Co., Ltd



**AVI PRECISION ENGINEERING PTE LTD**

1, KALLANG SECTOR #04-03, SINGAPORE 349276. TEL: 65 67483866 FAX: 65 67484810

Email: [avipre@avipre.com.sg](mailto:avipre@avipre.com.sg)

Company Reg No: 199300584 M

Website: <http://www.avipre.com>

Skype: avipre



# Imaging Scope

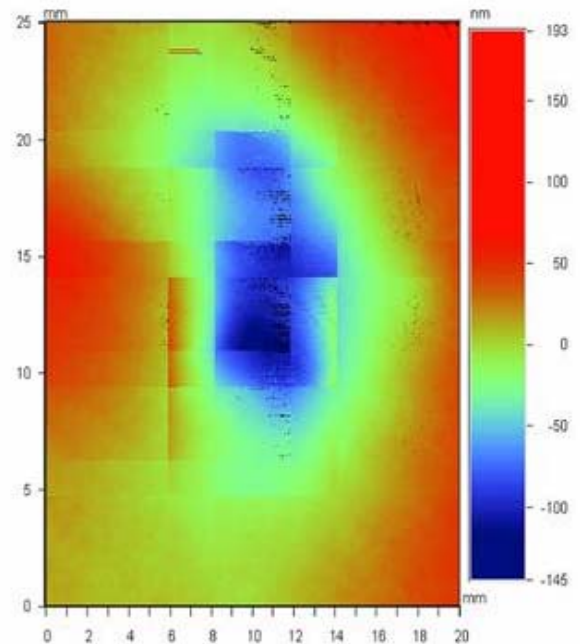
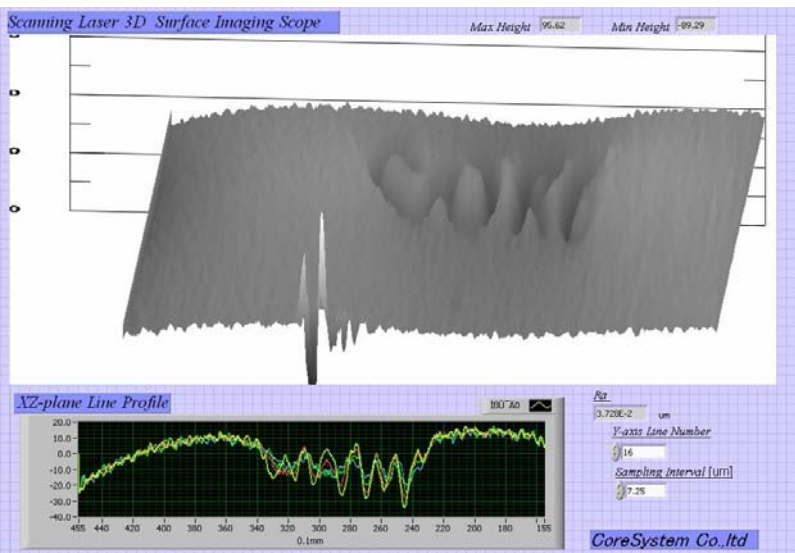
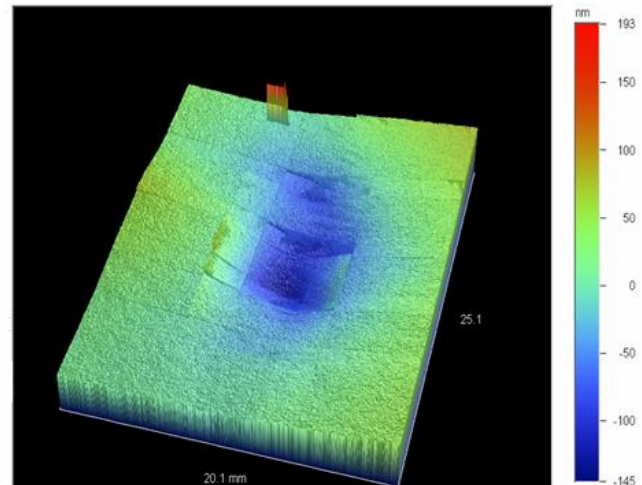
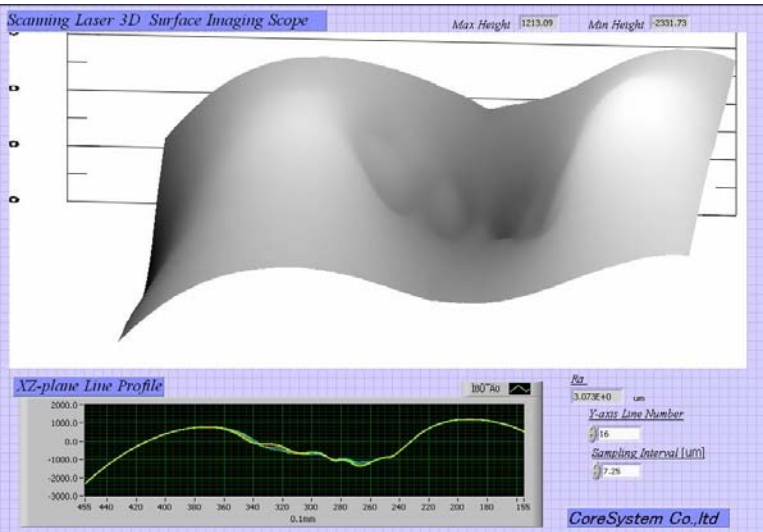
# CSM-02



Core System Co.,Ltd.

Core System

## 3-Dimensional Interactive Display



**AVI PRECISION ENGINEERING PTE LTD**

1, KALLANG SECTOR #04-03, SINGAPORE 349276. TEL: 65 67483866 FAX: 65 67484810

Email: [avipre@avipre.com.sg](mailto:avipre@avipre.com.sg)

Company Reg No: 199300584 M

Website: <http://www.avipre.com>

Skype: avipre