## The revolutionary instrument for VLSI process improvement.

## Stress Station

## New measurement trend in wafer bending:



According to ITRS and Intel's CMOS process technology, stress technology has become one of the key technologies in advanced nano-meter CMOS process including 90 nm and beyond. This stress station is capable of stress measurement in CMOS component and measurement of Piezo-resistance simultaneously. Similarly, this stress station is applicable to many research fields such as nano-wire, nano-tube, FinFET, GaAs component, SiGe channel component, Ge channel component, MEMS, LED, OLED, and PV.

## Features :

- Direct measurement of sample's strain.
- Intuitive mechanism design in wafer bending jig for easy operation.
- Measurement results used in published international SCI journal paper.
- Adjustable single axial-direction stress provided by designed bending jig. (Including tension and compression)

- Augmentable to include I-V measurement and low frequency noise


## Specifications :

| Interface | USB 2.0 | Max. sample size | $80 \times 100 \mathrm{~mm}$ |
| :--- | :--- | :--- | :--- |
| Measurement range | $300 \mathrm{MPa}^{*}{ }^{* 1}$ | adjustable span range in applied | 95 mm |
| force | Pitch in span adjustment | continuous adjustable |  |
| Stress resolution | 0.05 MPa | Dimension (length $\times$ width $\times$ height) | $240 \times 210 \times 195 \mathrm{~mm}$ |
| Stress type | tension or compression | Weight | 5 Kg |
| Young's modulus measure | Supported | Operating temperature | $-20 \sim+60^{\circ} \mathrm{C}$ |
| Real-time stress calculation | Supported | Standard Accessory | Calibration sample, Software CD, USB cable, |
| Real-time displacement analysis | Supported (Optional) | Panguage | English |
| Stress and applied force measure | Supported | Monitor Requirements | CPU:P4, HD:1GB, USB 2.0 |
| Max. applied force | 100 N | O.S. Supported | $1280^{*} 800$ resolution |
| Max. stroke of applied force | 3 mm | simultaneously | Windows XP, WIN 7 |
| Adjustment of applied force |  |  |  |

*1: This range is calculated based on the Young's modulus of silicon wafer.

Tel : +886-3-5936268
Mail : service01@chiefsi.com.tw
Web: www.chiefsi.com.tw

