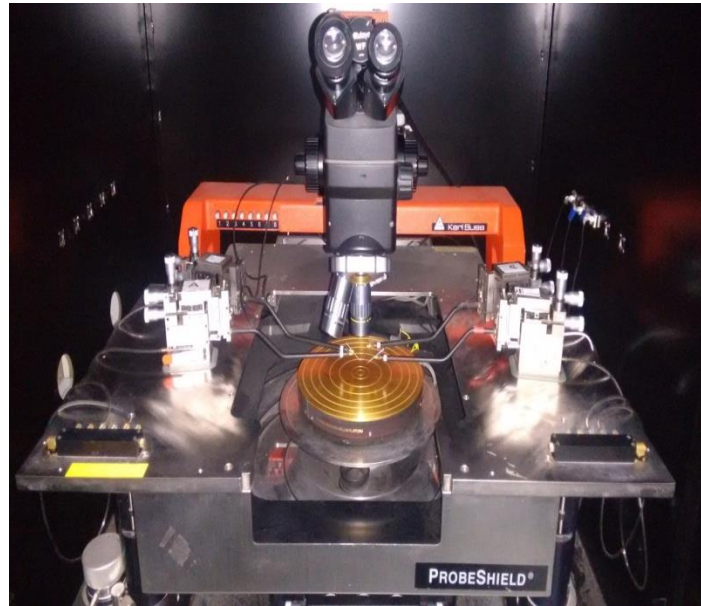


GLIMPSE : PHOENIX TOOL

Features of Model Keithley 4200 SCS (Semiconductor Characterization System):



Phoenix Tool

This system is used for temperature IV/CV measurements. It is a product by Keithley Instruments Model 4200 semiconductor characterization system (SCS).

Following Measurement can be done:

1. Room temperature 2, 3, 4 terminal IV.
2. Room temperature 2 terminal CV.
3. Temperature dependent IV/CV measurement.
4. Stress measurement/ Pulse measurement.

Following Measurement can be done:

1. Frequency/ Noise measurement.
2. Low temperature measurement.

Instruments Presents:

1. Keithley S4200 SMUs - 3
2. Keithley C4200 CV card – 1
3. Keithley 708 A switch matrix – 1
4. Keithley 4200 PG2 PGU – 1
5. Keithley 4200 SCP2 Scope card – 1

Specification:

1. Through SMU :
Max Voltage: 210 Volts
Max Current: 105 mA
2. Through LCR meter :
Min Frequency: 1KHz
Max Frequency: 10MHz

Instrument Connections:

1. Two SMUs are connected to switch matrix column 1 (SMU 1) and 2 (SMU 2) respectively.
2. SMU 3 is directly connected to manipulator B.
3. GNDU is connected to switch matrix column 4.
4. Manipulator A, C and D connected to switch matrix rows A, C & D respectively.
5. Chuck connected to row G.
6. LCR High connected to column 10.
7. LCR Low connected to column 11.
8. VPU channel 1 and OSC channel 1 is directly connected to the RBT.
9. VPU channel 2 connected to column 5.
10. OSC channel 2 connected to column 6.

Environmental Consideration:

1. Storage environment

- Temperature: -10 °C to +60 °C
- Relative Humidity: 5% to 90%, non-condensing

2. Operating environment

- Temperature: +15 °C to +40 °C
- Relative Humidity: 5% to 80%, non-condensing
- Proper Ventilation to avoid over heating. Allow at least 8 inches of clearance at the back of the mainframe to assure sufficient airflow.
- The model 4200 SCS should be operated in a clean dust free environment.