

# Signatone 4 Point Probe - Testing Wafer Resistivity

NOTES: DO NOT use excess force when lowering the probes

DO NOT leave probes on the wafer once testing is completed

1. Ensure the 4 point probe leads are plugged in properly to the Keithley Measurement Unit and the unit is plugged in.
2. Place the wafer on the white wafer stand.
3. Turn on the Keithley Measurement Unit.
4. Carefully lower the probes using the lever on the right.
  - a. The probes are reflected off the wafer. When the reflection and the probes have no separation, they are in contact.
  - b. Lower the lever slightly more to ensure complete contact.
  - c. NOTE: sometimes the native oxide will affect the measurement. If the wafer is being used only for testing and will not be further processed, it might be necessary to use a diamond scribe to scrape off the native oxide.
5. Select the “No Script” drop down menu in the top tab of the Keithley Measurement Unit.
6. Select the following script: “resistivitycg”
7. Follow the prompts and use the following inputs for full wafer resistivity measurements:
  - a. Thickness → 0.0208cm
  - b. Test current → 1mA
8. Note the measurement.
9. Raise the lever and either turn off the Keithley Measurement Unit or take another measurement.

NOTE: For statistical validation, take measurements of the following places:

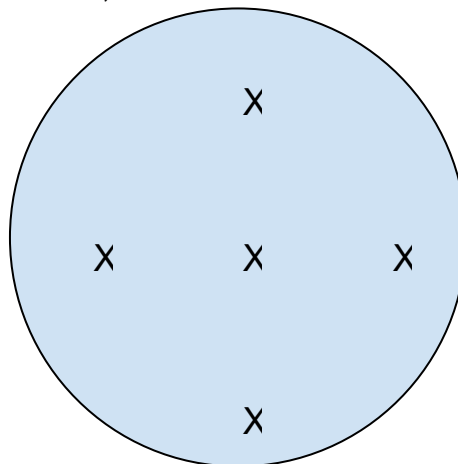


Figure 1. Wafer Diagram with the primary flat at the bottom. The “X” denotes the places that measurements should be taken.