

## Keithley Training

### Keithley Equipment

#### K1 (Keithley Station 1) – TWI Station

- Keithley 4200-SCS with 4 pre-amps
- Keithley 707A Switch Matrix
- Keithley 595 Quasi-static Meter
- Agilent 81110 Pulse/Pattern Generator
- Agilent 4284 LCR Meter
- Modified Cascade probe station with 6 Cascade DCM Micromanipulators

#### K2 (Keithley Station 2) – Long Term Reliability Station

- Keithley 4200-SCS with 4 pre-amps
- Keithley 707A Switch Matrix – (not installed yet)
- Agilent 4284 LCR Meter
- Custom built probe station with 8 Cascade Micromanipulators

### Keithley Training Modules

For each module teaching time is indicated. Practice time which is necessary, is not include in the time estimate. It is recommended that people practice in groups of two – one practices while the other observes and assists when needed. Before a user is qualified to use either K1 or K2, they must pass a test covering modules *Probe Station Fundamentals* and *Keithley 4200-SCS Basic*. Although modules *Keithley 4200-SCS Advanced*, *External Instrumentation*, and *Keithley 4200-SCS Expert* are not required to perform more advanced functions using the Keithley 4200 as these subjects can be learned through the online documentation they are recommended. Taking the additional training modules can dramatically increase the learning curve. **Before the certification test is administered a minimum of 8hrs of practice time is required. After successful certification, periodic oral tests are required to maintain certification.**

#### Probe Station Fundamentals – 1hr

- Manipulator cleaning, removal, and operation
- Wafer handling
- Tip changing, care and wafer probing

#### Keithley 4200-SCS Basic – 2hrs

- KCON – learn to setup the 4200, perform instrumentation integrity tests.
- KITE – create projects, execute tests, interface with the switch matrix

#### Keithley 4200-SCS Advanced – 2hrs

- KITE – Learn to cycle subsites, output test data to subsites, create custom devices and more

KULT – learn to program the Keithley

**External Instrumentation – 2hrs**

Learn how to interface the following instruments with the Keithley: Agilent 81110, Agilent 4284, and Keithley 595.

**Keithley 4200-SCS Expert – 3hrs**

KULT – learn to program external instruments over GPIB