

ICT Testability In A Perfect World Or, In which a lone Test Engineer Dreams Big Dreams

1. Test Points, Test Points, Test Points

- a. Bottom side accessible test pads.
- b. Pad sizes 0.025" or larger.
- c. Test Point to Test Point Centers 0.050" minimum
- d. Multiple Test Points on Power (some) and Ground (many).
- e. Pad size, Test Point Center and Top Access all affect cost.

2. Make My Life Easier With Your Design

- a. Don't connect that control signal to ground or power, use a resistor.
- b. If there is a choice between JTAG and non-JTAG device, pick JTAG.
- c. If the device has JTAG pins, use them.
- d. If there are multiple JTAG devices, chain them.
- e. Oscillators need disables, don't let high frequencies out uncontrolled.
- f. Put the Test Points In The CAD as discrete Test Points.
- g. If you have high voltages, make sure I can shut them off during test.

3. You People Are Crazy, I Can't Do That!

- a. Send us your design and we will evaluate the testability.
 - i. Recommend Test Strategy
 - ii. Suggest mechanical design for testability improvements.
 - iii. Suggest electrical design for testability improvements.
 - iv. Commiserate with you.
- b. Call us and we can talk about it.