



Robson Technologies, Inc. Connector Saver Solutions

Connector Savers Overview:

Most bed of nails test fixtures on the market are designed to probe pads and test points on one side of the unit under test (UUT). In some cases, the UUT is only one of many boards found in the final product. When additional PCBs with mating connectors need to engage the UUT during test, using low-lifespan and fragile connectors is not a viable long term solution.

In short, RTI's connector savers are customized pogo pin blocks that directly interface with connectors installed on PCBs, emulating an otherwise low-lifespan mating connector.

Connector Savers In Action:

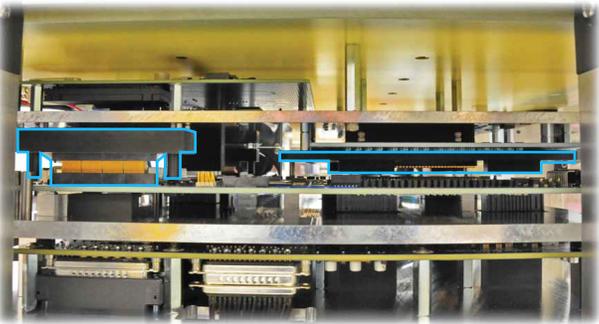
The connector on the board under test makes accurate and consistent alignment to the pogo pins in two ways:

First, the entire connector saver floats independent of the test fixture. This allows the pogo block to meet the connector's position during insertion while the UUT maintains precise alignment to the other test points.

Second, the cavity of the pin block has chamfered edges that help guide the pins into alignment with contacts in the UUT's connector housing.

Connector Savers In Functional Fixtures:

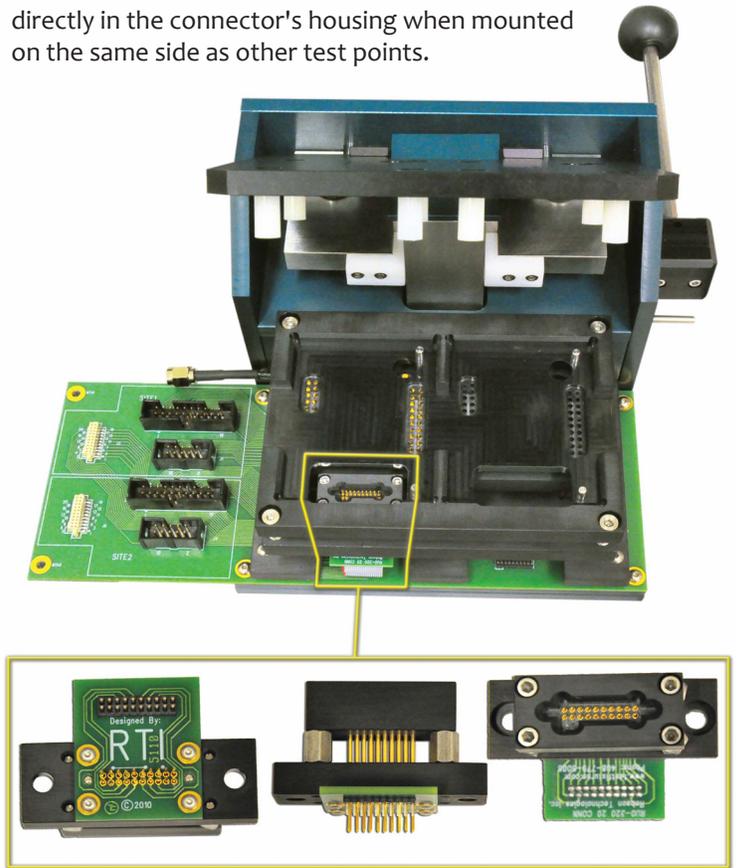
Connector Savers are found in RTI's functional PCB test fixtures where the UUT board uses mating connectors to engage with other PCB sub-assemblies that are required during test and built into the test fixture. Connector Savers shown in blue also include springs with significant resistance in the housing that apply steady force against the UUT to facilitate smooth engagement and disengagement.



Connector Savers In Test Presses:

Connector savers are used in RTI's interface modules for manual and pneumatic test presses when the UUT board has a connector installed that needs to be probed during test.

The connector saver pin block sits between the breakout PCB in the bed of nails interface module and probes the mating connector on the UUT via solder tails on the backside or directly in the connector's housing when mounted on the same side as other test points.



Connector Saver Considerations:

Extend the lifespan of your test fixture:

- ♦ High performance connectors used in the assembly of the end product are not designed for test.
- ♦ Constant mating and unmating of connectors causes significant wear and puts physical stress on each component, reducing reliability over time.
- ♦ It is often cheaper and easier to replace a degrading connector saver than replace mating connectors or re-spin new PCBs.
- ♦ Connector Savers can mate with common Mictor, Samtec, FCI, and other connectors that have spacing of 0.4mm pitch or greater