Pogo-Pins Without the Clamshell

Tech Brief

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Pogo-Pins *Without* the Clamshell

Pogo-pins, also known as spring pins, are usually associated with clamshell fixtures. Pogo-pins provide access to testpoints and depopulated SMT pads, but what if manual probing and operation are still desired? While a clamshell is needed to provide the necessary opposing pressure to balance accumulated forces from high pincounts in complex applications, it is *optional* in simpler applications.

Boards with testpoints in the dozens can be probed without a clamshell fixture, allowing a combination of automated and manual access. This lower-cost blend of pogo-pin and cabled test removes the clamshell and thus the need for up-front full-coverage development. The following figure shows an example of a single-sided pogo-pin fixture with optional toggle clamps or thumbscrews for affixing the UUT:

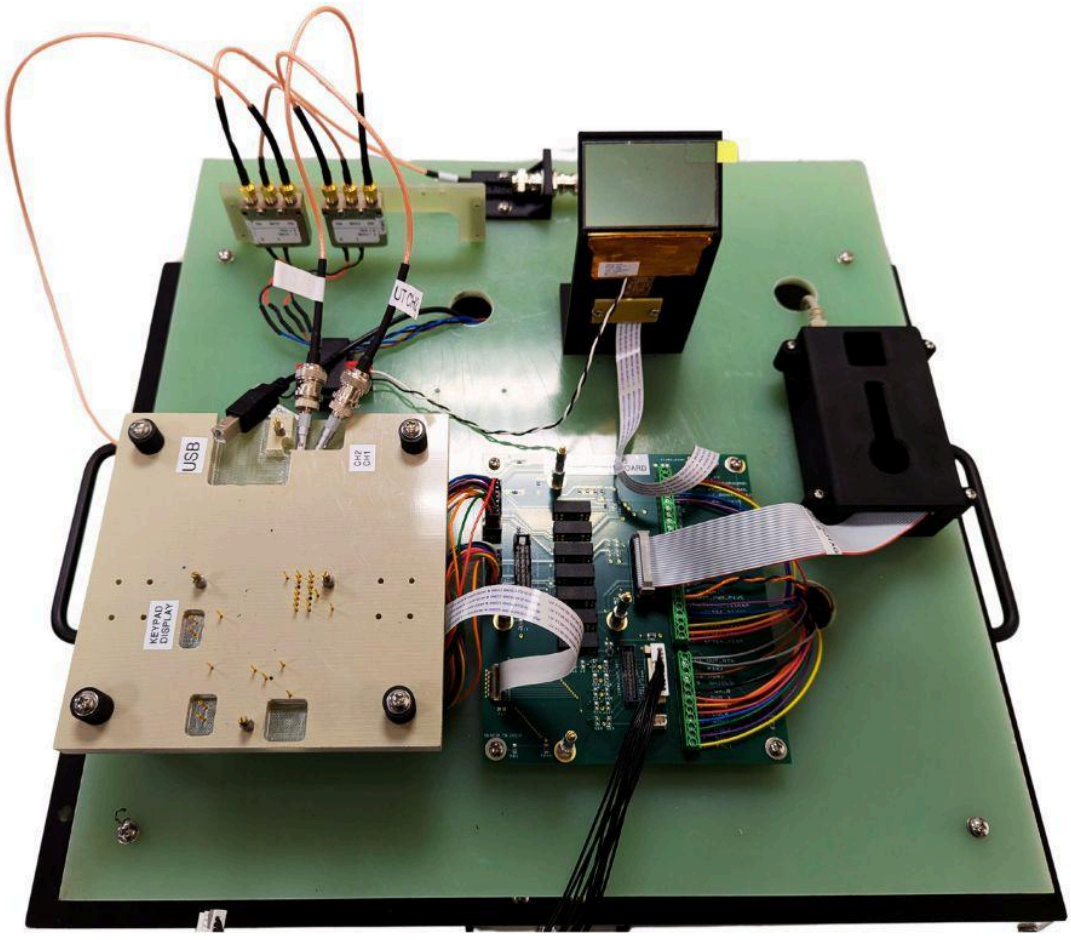

Figure 6: Open-Access pogo-pin fixture

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Cables are connect to the UUT at various locations during test and there is full access to the top side of the board. A mirrored mount adjacent to the pogo-pin plate allows a skilled technician to flip and mount the board with all cables connected to manually probe and troubleshoot anywhere on the UUT.

The pogo-pin plate adapts the testpoints to cabled form, making the pogo-plate a modular part of the cable harness in the fixture. This modular approach maintains the adaptability advantage cabled fixtures have over clamshell fixtures. The pogo-pin plate is inexpensive and easy to replace for UUT design changes, making this approach desirable for early deployment or frequently changed designs.

For More Information

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