

Design recommendations for PCBs

In order to realise a reliable, economic test solution, taking the following points regarding PCB development into account is advised:

- Two 3mm (or larger) boreholes are needed to position the PCB on the test fixture. These should have as large a distance as possible from each other and a length/size tolerance of ± 0.05 mm or smaller.
- For standard contacting with no additional guidance, test pads have to have a diameter of 0.6 mm or larger. With the use of an addition guiding plate for test probes, test pads 0.4 - 0.5 mm in diameter can be reliably tested. These test pads, as well as the tooling holes, must have a length/size tolerance of ± 0.05 mm or smaller.
- The grid size (distance between test points, or pitch distance) should be 50 Mil (1.27mm) or larger. Standard contacting without additional guidance of receptacles is possible with grid sizes 75 Mil (1.91 mm) and above.
- Test pads must have a distance of 1 mm from components to avoid damaging them. A minimum of 2mm distance between test pads and components is required for component heights over 5 mm to avoid interference of test points with the milling out for components and collision of test probes with components when the fixture closes.
- Sufficient space free of components and PCB tracks must be available for the positioning of pushrods (top) and PCB support pin (bottom).

If one of the points listed cannot be fulfilled, detailed checks to ensure reliable contacting is possible have to be performed. In this case, please contact your technical contact person at INGUN.

