Service : Test Hardware

Purpose

Design, development and assembly of test hardware.

Test hardware includes the PCBs , connectors and components which are not part of the ATE (automatic test equipment).
It is project specific and serves for

-Connection ATE to the DUT (Device under test)
-Implementation of the specified test circuits at various test conditions

Bluetest Expertise

Test hardware and test software development is core competence of Bluetest.
With our experience we will find out the optimal test solution for your device.

Our docking concept allows demand-oriented, cost efficient and fast implementations of complex test circuits at high performance.
In addition it offers sufficient space for special constructions e.g. for an illumination source to stimulate a CMOS image sensor..

**Activities
Participants**

Design, application
test engineer, PCB layout and manufacturing, probe needle manufacturing

Requirements, Input

Test specification, test concept identifying number of sites (multi-site testing) and the details of wafer and final test flows.

Performance

Test hardware design is one of the first steps of a test program development
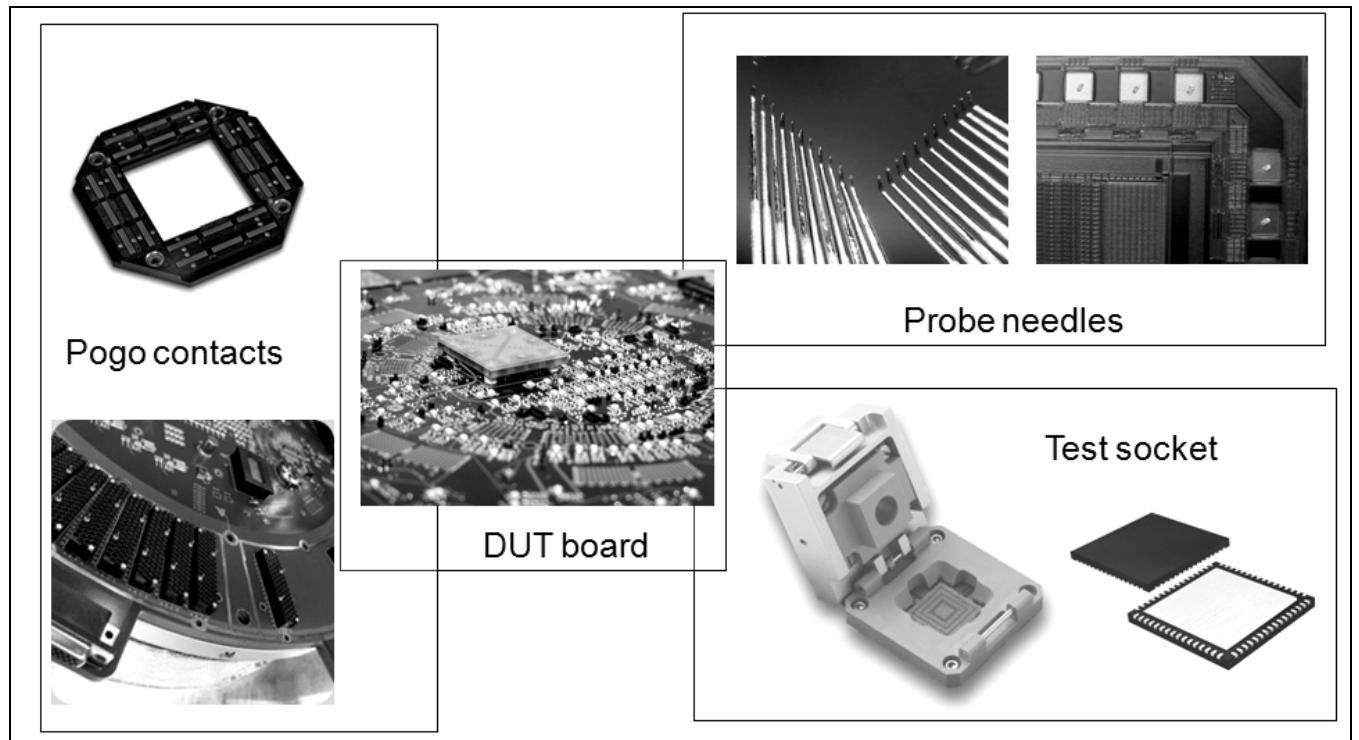Schematics will be discussed with our customers before layout.
The completed layout needs another review in respect of placement and routing.
Test socket type and probe needle technology have to be decided before as they are influencing the PCB layout.
Bluetest recommends high reliability test sockets or probe needles.
Test hardware is customer property. With our know-how and experience.
we will support your selection which is sometimes a difficult decision between durability, robustness and costs.

Image: Test hardware, never stronger than its weakest link.

Pogo contacts

DUT board

Probe needles

Test socket

PCB manufacturing starts after layout release. The project schedules should consider the time which is required for manufacturing, assembly and delivery times of sockets.
It is recommendable to start the test hardware development and manufacturing at an early stage.

Result, Output

The test hardware should be checked with the available portions of the test program immediately after completion in order to detect eventual failures or damages.
Very complex test hardware requires self test routines.

The extensive electrical measurements for final acceptance will be performed during test program release procedure.

 Bluetest, 14.2.2013