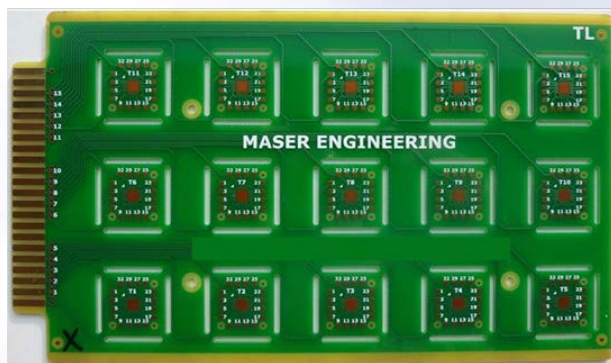
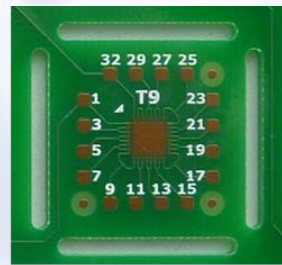
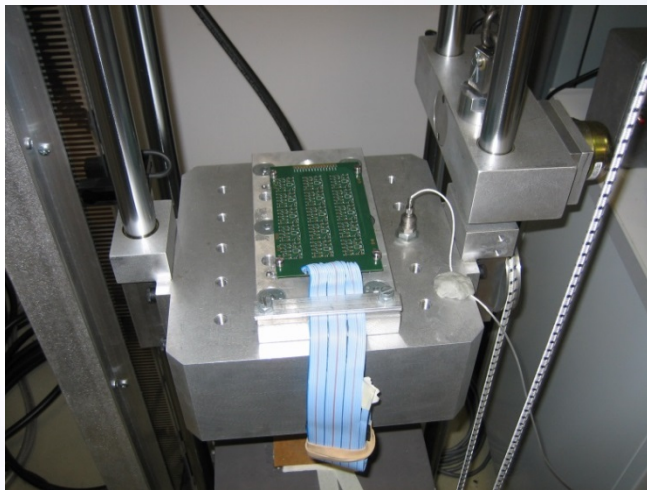


# Board Level Reliability (BLR) test services

Board Level Reliability (BLR) tests are intended for characterisation of solder joints for package concepts. For the drop, bending, TC and vibration test daisy chain devices are used in test with glitch/event detection. A weibull plot is used for reporting the results



## BOARD LEVEL RELIABILITY TESTS:

- Characterisation of package solder-joint reliability using weibull
- Daisy chain devices used for test
- Glitch/event detection and monitoring
- In-house board design capabilities
- Thermal cycling (JEDEC)
- Drop test (JEDEC)
- Dynamic board bending (JEDEC)
- Static (monotonic) board bending
- Vibration test

## BLR BOARD DESIGN:

- In-house design capability and know-how
- Project management of board manufacturing and assembly
- Standardized board size for DROP and Bending test: 132x77 mm (JEDEC) 8-layer FR4 boards
- Standardized board size for TC tests 220x127 mm 2-layer FR4 boards (using break away PCB per device for FA)

## BLR THERMAL CYCLING:

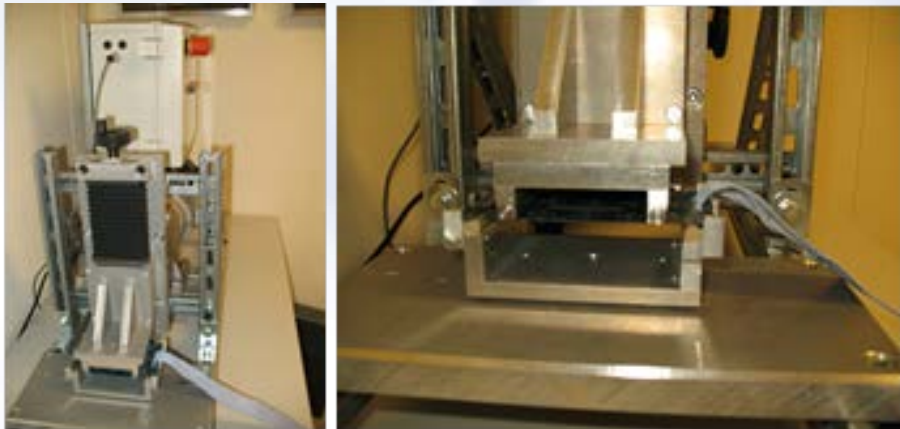
- 2x Espec TCC-150W
- 1x Espec EGNZ12-7.5cwl
- 1x Espec HC-120
- JEDEC JESD22-A104
- Typical test condition: -40/+125°C, 1 cycle/hour and ramp-rate: 10-11 K/min
- Data acquisition by daisy chain resistance monitoring
- Central Monitoring System (CMS)

## Board Level Reliability (BLR) test services



### BLR DROP TEST:

- 1x Lansmont Drop tester
- 1x MASER BLR Drop tester (developed by MASER Engineering)
- Glitch detection by daisy chain resistance monitoring
- Specification:
- JEDEC JESD22-B111, 1500g, half sine, 0.5ms, drop until fail or 1000 drop cycles
- Customer, 1500g, half sine, 1.0ms, drop until fail or 1000 drop cycles



### BLR BENDING TEST:

- 1x MASER Bending tester (developed by MASER Engineering)
- Data acquisition by daisy chain resistance monitoring
- Specifications:
- JEDEC JESD22-B113 (Dynamic) up to 200.000 cycles
- IPC9702 (Static)
- IEC 60068-2-21 (Static)



### BLR VIBRATION TEST:

- Electro Dynamic Shaker (ETS Solutions M124/GT600M)
- Data acquisition by daisy chain resistance monitoring
- Specification:
- Frequency range: DC – 4000Hz
- Sine acceleration: 100g
- Sine force: 10.000N/1.000kgf
- Displacement: 51mm

For more info please visit [www.maser.nl](http://www.maser.nl)  
For inquiries please contact : [info@maser.nl](mailto:info@maser.nl) or call +31 53 480 26 80