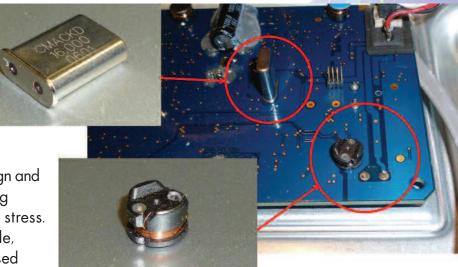
## HALT – Highly Accelerated Lift Test

HALT is a process used on electronic assemblies and modules to determine weaknesses and the stress limits of a product by temperature cycling and omni-axial random vibration step stress. Inherent weaknesses in a products design and build are stimulated by applying increasing levels of mechanical stress. Within an accelerated timescale, faults in a product can be realised prior to product release and preventing



failures occurring during after-sale user operation, very often during the warranty period.

**HALT** is used as part of a products development, NOT to simulate normal to most extreme operating conditions, but to stimulate a product failure mechanism and to exceed the UUT design limits in order that weaknesses in the products design are identified and can be "designed out".

## **HALT Consultancy and Planning**

- HALT consultancy and training
- Product analysis

- HALT strategy/plan development
- Product drive and monitor during HALT

## The complete HALT process

- Low temperature test determine the products lowest operating temperature
  High temperature test determine the products high temperature operating limit
  Rapid temperature cycling increasing ramp rates within upper and lower
  - temperature limits Multi-axis random vibration increasing level to stimulate
  - failures
  - Combined temperature and vibration
    - HALT result analysis
      - Product design change analysis





Cam Mills, Lower Cam, Dursley Gloucestershire UK GL11 5PW Tel: +44 (0)1453 541200 Contact: Mark Ashley Email: sales@reltech.co.uk Web Site: www.reltech.co.uk

