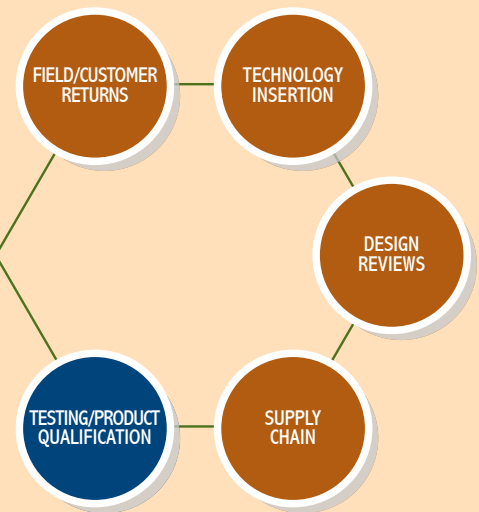


Testing/Product Qualification

Will Your Product Withstand the Stresses Exerted On it by the User?

DfR Can Design and Conduct Standard and Customized Stress Tests to Assure Product Reliability



The only way to ensure that your product becomes a staple in your target market is to meet and exceed customer expectations. In today's competitive and fast-paced electronics industry you need to be proactive to minimize any delays that may be caused by design or manufacturing deficiencies. DfR Solutions offers a turnkey solution for the quality and reliability needs of your company.

Life Testing

Starting at the design stage and continuing throughout the lifecycle of the product, DfR has direct experience in designing, performing, and interpreting the results of accelerated life tests using a philosophy based on physics of failure (PoF). DfR takes pride in its ability to go beyond standard industry specifications to provide uniquely tailored test strategies. DfR will develop test strategies based on the individual product design and materials, the use environment, and validated failure models.

- o Standard and Unique Tests Designed to Replicate Field Conditions
 - Temperature Cycling
 - Vibration (Electrodynamical and Repetitive Shock)
 - Temperature/Humidity
 - Mixed Flowing Gas (MFG)
 - Mechanical Shock/Drop
 - Electrical (Partial Discharge, ESD, etc.)
- o Tests required to Minimize the Risk in the Transition to Pb-Free
- o Tests Designed to Re-Establish Confidence in an Out-of-Control Supplier or Process
- o Cleanliness and Contamination Testing

Product Testing

The staff at DfR is knowledgeable and skilled in all industry test specifications, but we are also keenly aware of those test specification's limitations. This knowledge puts us at the forefront of the test industry and provides you with the solutions you need to assure your product's longevity. We provide, and go above and beyond these common industry test specifications:

- o MIL-STD-202, MIL-STD-750, MIL-STD-810
- o IPC-TM-650 and IPC-9700 series
- o JEDEC JESD test requirements
- o Telcordia GR-78-CORE
- o Others (IEC, JEITA, JIS, etc.)

Who We Are

DfR was initially formed by several senior scientists and staffers from the University of Maryland's Center for Advanced Life Cycle Engineering (CALCE) for Electronic Product and Systems, and has now expanded to include personnel with backgrounds from several industries (automotive, avionics, contract manufacturing, industrial controls, and superconductors). With years of experience in QRD research and consulting, the personnel at DfR are motivated to provide knowledge and science-based solutions to maximize and accelerate the product integrity and assurance activities of their clients.

How Can We Help You?

For more information about DfR Solutions' Testing/Product Qualification, or any of DfR's other services, seminars or products, call us at 301-474-0607 or email askdfr@dfrsolutions.com.

Let DfR Solutions Take Your Reliability Concerns... and Make Them Ours

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