

**Reliability Testing & Monitoring**

Temperature Cycle	Accelerated stress test where product moves between hot and cold air zones usually +150C & -65C for 1000 cycles over 2wks
Thermal Shock	Accelerated stress test where product moves between hot and cold liquid baths usually +150C & -65C for 100 cycles over 2 days
Temperature / Humidity	Product stored in a pre-set temp & humidity atmosphere for up to 1000hrs. Devices may also be powered up to stress the die
HAST	Highly accelerated stress test where product stored in moisture under pressure at 131C 85%RH usually for 96hrs Devices may also be powered up to stress the die
Autoclave	Accelerated stress test where product stored in moisture under pressure at 121C 100%RH usually for 96hrs
High Temperature Storage	Accelerated stress test where product stored in a high temp usually 150C at room atmosphere for up to 1000hrs.
Cold Temperature Storage	Endurance stress test where product stored in a low temp usually -40C at room atmosphere for up to 1000hrs.
IR Solder Simulation	Simulates the temperature profile of the solder process of mounting on PCB. Normally 3 passes with peak temperature of 260C
Preconditioning	A moisture level graded flow sequence to simulate the steps seen by devices from assembly to mounting in a circuit board.

**Failure Analysis Capability**

Low Power Microscope	Inspection up to 200x
High Power Microscope	Inspection up to 1500x
Scanning Electron Microscope	3D image up to 50,000x, EDX gives display of detected elements
Scanning Acoustic Microscope	inspection of the integrity of molded devices & the interfaces between the various internal materials.
Open Short Tester	PC driven test programs & multi package sockets provide basic continuity check between all terminals of the device under test.
Curve Tracer	Displays relationship of current with applied voltage at selected device terminals
Micro Prober	Direct contact to die bond pads to check electrical parameters by-passing the bond wires.
Decapsulation	Etches a window thru the mold material to allow die & internal assembly inspection.
X-Section Analysis	Structural inspection of internal assembly components.
X-ray Inspection	wire bonding & die attach integrity inspection