



Ironwood
ELECTRONICS

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Ironwood Electronics uses the CheckSum Model TR-4 Manufacturing Defects Analyzer System to test adapter assemblies to find manufacturing defects such as opens, shorts, and components with incorrect orientation. The CheckSum Model TR-4 Test System provides a flexible software environment to solve unique testing problems.

The System makes high-speed measurements for opens and shorts, resistances, capacitances, inductances, voltages and semiconductor junctions. For each test it takes a measurement of a pair of test points in the unit-under-test (UUT) and compares the outcome against individual, user-specified upper and lower test limits.

The System software provides the ability to program the test sequence for a UUT. The System can self-learn some UUT attributes, such as opens and connections, diode mapping for IC orientation and presence. Once a UUT is tested, various test reports can be generated.

Ironwood specializes in test adapters which can be used to interface the MDA tester and the UUT during high volume MDA test.

The CheckSum Model TR-4 Manufacturing Defects Analyzer has been designed to:

- 1) effectively measure a variety of components, both out-of-circuit and in-circuit.
- 2) Accommodate the variety of in-circuit conditions that can occur.

The System offers several measurement methods and options.

The System contains two separate measurement modes:

Current Mode - Uses a DC constant-current stimulus for taking measurements.

The Current Mode uses a precision constant-current source in conjunction with a voltage measurement capability to effectively test resistors, semiconductor junctions, and capacitors.

Voltage Mode - Uses either AC or DC voltage stimulus for taking measurements.

The Voltage Mode provides the capability to measure resistors, capacitors and inductors.

It can measure using DC voltage or AC frequencies of 100 Hz and 1 KHz as stimulus.