

TR5001V

ICT with Functional Test System

Vacuum Type



- Add Functional Test with PXI Modules
- Cost Effective Digital 1:1 Driver/Receiver per Pin Architecture Design
- Powerful Boundary Scan Test Solutions
- Easy to Use On Board Programming Software
- Full Upgrade Options from MDA to ICT and Functional Test

TRI

Analog Test

High Performance Manufacturing Defects Analyzers(MDA)

RCL Measurement

- 6-Wire Measurement
- Auto Guarding Feature
- AC Phase Measurement
- High Speed Test

Agilent TestJet Technology

To find open connections to surface-mount technology (SMT) devices such as ICs and connectors



Agilent TestJet Technology

Intel® Socket Test Technology

A superior test method that can replace Intel CPU B-Scan and TestJet with increased coverage.

- Test Coverage Comparison
- CPU using B-SCAN & TestJet \cong 37%
- Socket Test Technology \cong 98.6%
(Measures power and ground connections with custom test socket)



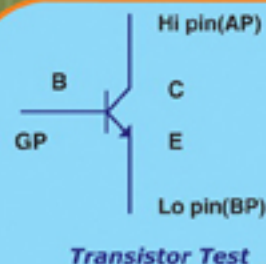
Intel® Socket Test Technology

Capacitor Polarity Test

- Leakage Current Measurement
- Agilent TestJet Detection

Transistor / Diode Measurement

- Diode
- Zener Diode
- Transistor : PNP , NPN
- FET / SCR / TRIAC
- Photo Coupler

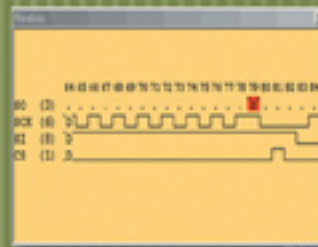


Digital Test

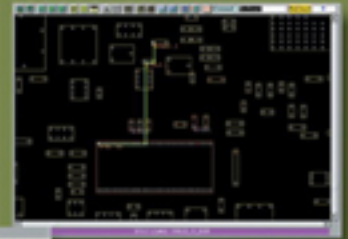
Full Digital In-Circuit Test (ICT) User Friendly Interface

TR5001V provides a simple to understand and flexible interface

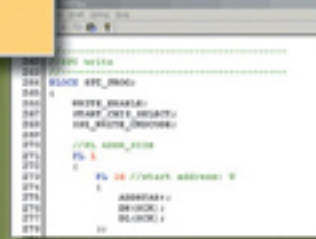
- Color syntax program editor
- C-like test language
- Editable waveform display tool
- Integrated development environment



Waveform display



Board view with trace display capability



Color syntax program editor

Easy to Use On Board Programming Software

Modularized memory algorithms provide convenient On Board Programming solutions

- Flash Programming
- Serial Device Programming

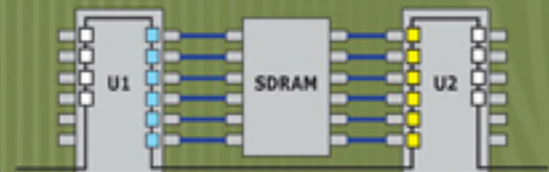


Flash Programming

TR5001V

Powerful Boundary-Scan Cluster Test Capability

Auto-Generation of test program and reporting through Boundary-Scan Test Program Generator (BSTG) for different kinds of test categories, such as individual boundary-scan device tests, boundary-scan devices chain test, and virtual nails test for RAM, ROM, TTL, and TREE devices



Boundary-Scan Virtual Test

The Most Cost-Effective Test Strategy

Non-Multiplexing Pin Design, Driver / Receiver to Pin Ratio 1:1

- Optimized Nail Placement with 1:1 Ratio Flexibility
- ECN do not require moving existing wires in your fixture
- 1:1 Driver / Receiver per pin provide for the fastest test program development and debugging

Functional Test

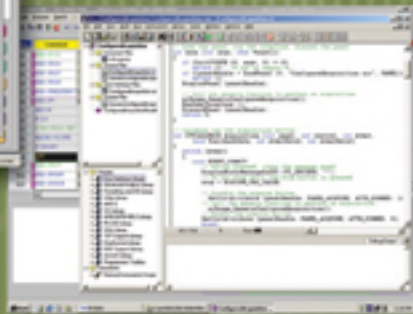
Built-in PXI Module Solution for Functional Test **Integrated In-Circuit and Functional Test in One System**

Lowering Overall Test System Cost

- Auto integrate PXI software and hardware
- PXI hardware modules
- Supports RS232 interface and bus
- Wide selection of PXI or GPIB hardware options
- Share PC, fixture, and power supplies for all test strategies
- New 2-Stage design for ICT & Functional Test



Free running functional test result



Supports NI-CVI functional programming

Worldwide Service & Support

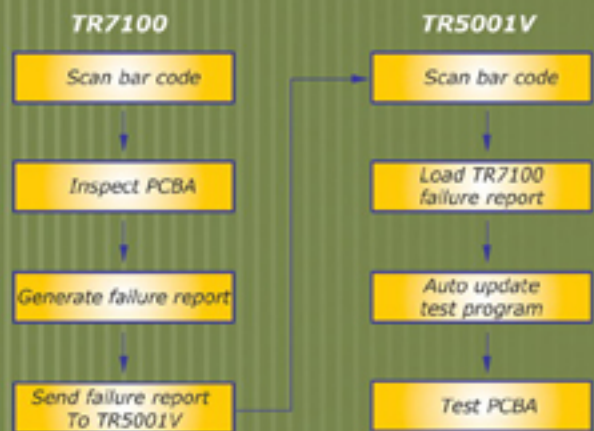
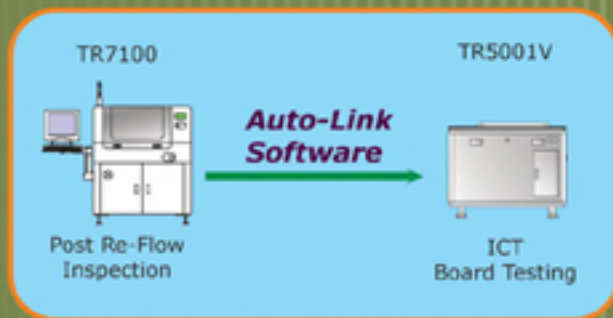


• Branch office • Distributors

Software & Network

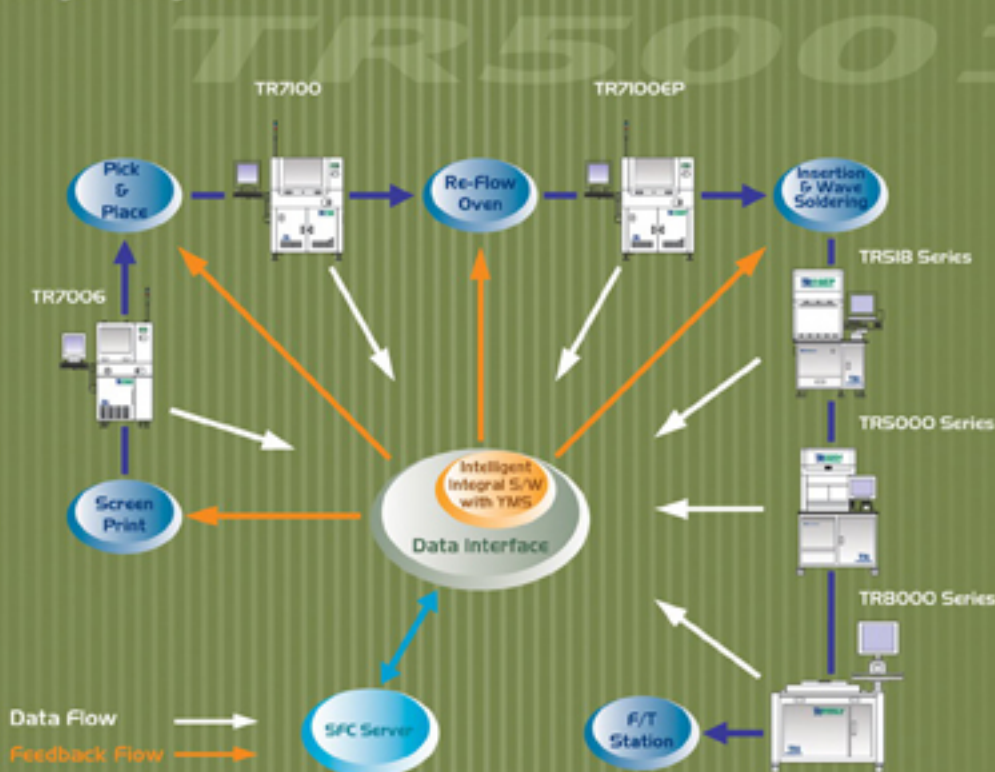
Auto-Link Software for ICT and AOI Optimization

- Auto link TR5001V ICT and TR7100 AOI to get the best test strategy
- Optimized program development
- Test coverage analysis
- Dynamic data link
- Auto double confirm if needed



Yield Management System

- Tester enable process capability control
- Real time defect information integration and analysis
- Defect knowledge management



SPECIFICATIONS

General

Maximum Analog Test Points 2048 or Maximum Digital Test Points 2048
IBM Compatible PC
Operation System: Microsoft Windows2000/XP
Power Requirement: 90-130V/180-240V Auto-Switch, 50/60Hz, 3KVA Max.
Fixture Type: Vacuum Type

Analog Hardware

Measurement Switching Matrix: 6-wire measurement

Programmable Frequency: 100Hz, 1KHz, 10KHz, 100KHz, 1MHz
Programmable DC Voltage Source: 0 ~ ±12V, Resolution: 5.86mV
Programmable DC Current Source: 0 ~ ±200mA, Resolution: 0.2mA
Programmable AC Voltage Source: 0~7Vrms, Resolution: 5.86mV
Programmable High Voltage DC Source: 0~45V, 50mA

Component Measurement Capability

Resistance 1 ohm~40M ohm
Capacitance 1pF~40mF
Inductance 1uH~60H

Analog Measurement

AC Voltmeter: 0~100V
DC Voltmeter: 0~±100V, Resolution: 2.5mV~50mV
DC Ampmeter: 1uA~160mA, Resolution: 30nA~30uA

Optional Hardware

Analog Test

Agilent TestJet Technology: Vectorless Open Circuit Detection
Arbitrary Waveform Generator (AWG): Frequency range 0~100KHz, Resolution: 0.15Hz

Digital / Functional Test

Non-Multiplexing 1:1 per pin architecture
Pin Drivers: Programmable levels 0.5V to 4V
Pin Receivers: Programmable levels -5V to 5V
Maximum Sink/Source Current 500mA
Output Impedance: <1ohm
Pull-up/pull-down Resistor 4.7K
DUT Power Supplies: 5V@3A, 3.3V@3A, 12V@3A, 18V@3A, -12V@3A, 24V@3A
Programmable DUT Power Supplies: 5V@10A, 8V@6.25A, 20V@2.5A, 35V@1.5A
60V@0.8A, 100V@0.5A, 50V@5A, 5V@20A, 8V@12.5A
20V@5A, 35V@3A, 60V@1.6A, 100V@1A, 50V@10A

On-Board Programming of Flash & EEPROM Memories

MAC Address Programming: Supports MAC Address Programming with MAC address being supplied from server

Boundary Scan: includes B-Scan Chain Test, B-Scan Cluster Test & B-Scan Virtual Nails Test Facilities

Tree Test Facilities with BGA Test: Pattern generator for detection of pin opens for BGA/VLSI chip

Support PXI , GPIB, RS-232 Standard Architecture For Functional Test

Dimension / Weight

Height x Depth x Width / Weight : 800mm x 850mm x 1030mm/230kgs

Powerful Software Environment

Microsoft Windows operating system software User friendly interface

Automatic Test Program Generator

Automatic disable generation of surrounding components

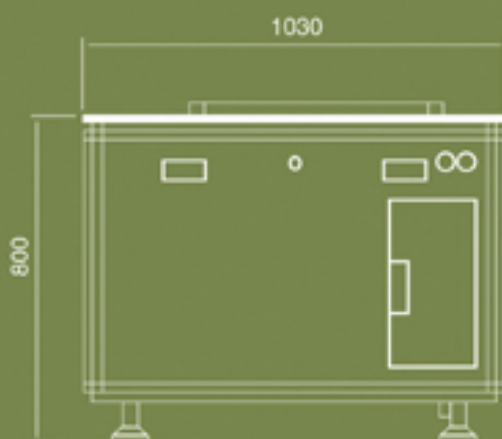
Automatic test generation with Auto-Learning of open/shorts using IC Clamping Diode and Agilent TestJet techniques

Auto Debug of passive components

Built-in self-Diagnostic function

FABmaster paperless repair station & real-time process monitoring

Board view displays test fail devices and pins instantly



★ Specifications subject to change without notice

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