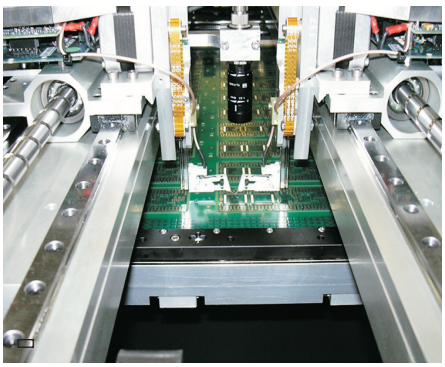
COMPLETELY AUTOMATED, HIGH SPEED TEST, over 4500 test points per minute

S24 VIP

Flying probe tester for BARE BOARDS

››› HIGH ACCURACY FOR LARGE SIZE PCBS



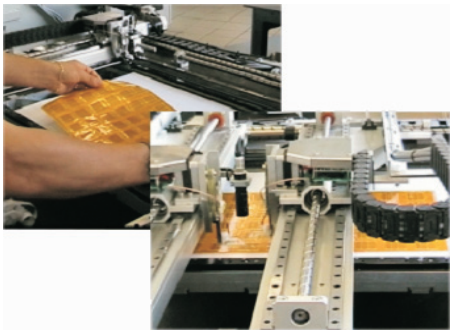
The S24 VIP Bare Board Tester is a flying probe system designed to test any type of printed circuit board,from simple, single side circuits,to complex multi-layers,inner-layers and ceramics. The system is able to test very large boards and panels thanks to an extensive test area (610mm x 610 mm or 24"x24") and the integrated repair software enables S24 VIP quick location of any defect found on the tested circuits.

››› SPEED, ACCURACY AND RELIABILITY

Speed, maximum accuracy and measurement repeatibility thanks to leading edge mechanical technology: the X and Y axes of the S24 VIP utilize latest-generation roller bearings and powerful brushless motors coupled with pre-loaded, high precision ball screws to move the four measurement probes.

››› FLEX BOARDS TEST

It is very easy to test flex boards with the S24 VIP system. The only operation required is to insert the vacuum table (option) in the work area to test even the thinnest flex boards.



Last revision: 09/10/06

VIP® VIVA INTEGRATED PLATFORM

It is a new digitally designed platform with a unique software and hardware core, a base for multiple strategies needed to address the challenges of electronic testing from the New product Introduction stage, in manufacturing, right through to logistics center test and repair.

VIP includes:

- VIVA SOFTWARE

innovative test environment to optimize the three phases of test:
1. Prepare -> **2.** Verify -> **3.** Test

The system software operates under the Windows 2000/XP environment and is very simple to use, thanks to the "Test Wizard", which guides the operator through the steps needed to create a new test program in a matter of minutes, starting from the PCB data in the IPC-D-356A format. A complete set of automatic software procedures then optimize probe movements to minimize test time.

The only manual operation required is the definition of at least two reference points on the first board to be tested, using the integrated vision system, in order to enable the automatic translation of the test coordinates at the beginning of the test. Defining the reference points on both sides of the PCB, the translation is executed independently for each side, thus eliminating any problems due to misalignments between top and bottom layers.

Periodic calibration of the test probes is simple and fast using the interactive procedure integrated in the software and the dedicated card supplied with the system, and the S24 VIP software also provides a complete, interactive set of autodiagnostic tools which enable the user to monitor, in real time, the operating status of the system. In addition a remote service option is available for technical support via modem.

Seica Test Solutions

S24 VIP

SYSTEM CHARACTERISTICS

-4 Independent Flying Probes for independent X,Y and Z movements, (2 on Top and 2 on Bottom side)
-2CCD Cameras for Optical Alignment and Vision Tests, (1 on Top and 1 on Botton side)
-1 fixed probe for GND reference

-Brushless motors with integrated Encoders for X and Y Movements
-Stepper motors with encoders for Z-Movements

MEASUREMENT CAPABILITIES

-Continuity test with resistive method:1Ω-10kΩ
-Contuinity test with capacitive method
-Isolation test with resistive method:10kΩ-1GΩ
-Isolation test with capacitive method
-Voltage measurement:1V-50V (500V option)
-Capacitance measurement:0.1pF-100mF
-4 wire mΩ test
-Parametric test of embedded passive components (option)
-Visual inspection (option)

TEST AREA & PCB CHARACTERISTICS

-Test Area:610mm x 610 mm (24" x 24")
-Maximum testable board size: 610mm x 1000mm (24" x 40")
-Minimum board size: 65mm x 20mm (2.5" x 0.7") manual load
-Minimum board size:120mm x 120mm (4.7" x 4.7") automatic load
-Maximum PCB Thickness:9mm (0.27")
-Minimum PCB Thickness:<0.1 mm (0.0039") using vacuum table (option)
-Minimum Pad size: 50 µm (2 mils)
-Minimum Pad Pitch:100µm (3.93mils)
-Board alignment: Automatic optical alignment

BOARD LOADING

-Manual and automatic

POWER SUPPLY AND CONSUMPTION

-110V-10%+15% 3500W or
-230V-10%+15% 3500W

DIMENSION AND WEIGHT

-System Dimensions:1880mm L x 1240mm W x 1700mm H (74" L x 49" W x 67" H)
-System Dimensions with Loader: 4480mm L x 3040 W x 1880mm H (176.3" L x 119.6" W x 74" H)
-Net Weight:1577kg (3485lbs)

ENVIRONMENTAL OPERATING CONDITION

-Temperature 25°C 10°C (77°F 50°F)
-Humidity 30-80%

›››HIGH PERFORMANCE VISION SYSTEM

In its standard configuration the S24VIP is equipped with a complete vision system which includes two CCD cameras, one for each side of the PCB. The cameras can be used for:

- **Recognition of fiducials for automatic centering of the board under test;**
- **Verification/modification of test points;**
- **Viewing the test probes during test;**
- **Optical inspection of parts on the board under test.**

›››TO SATISFY HIGH PRODUCTION VOLUME

The high performance S24 VIP flying probe, comes equipped with the innovative and unique Multi-Type Board Handler (MTBH). This is the ideal solution for the high mix, low volume manufacturing environment typical in today's PCB market, since the user can load various numbers of different PCBs (up to 100) into the Board Handler, which are conveyed into the system by the SMEMA conveyor included in the S24 VIP, tested, and conveyed back out of the system and sorted by test result, enabling completely operator-free test cycles. The large test area of the S24 VIP provides optimum versatility for all types and sizes of boards, and the VIVA Integrated Platform ensures fast and easy test program generation and implementation.

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