

#### **FLYING PROBE SYSTEM**

# Pilot<sup>4D</sup> H4

## Pilot<sup>4D</sup> Line



The Pilot<sup>4D</sup> H4 represents the best solution for those looking for an economic flying probe system. This is the ideal solution for low to medium volume production with the ability to expand at a future date. Equipped with 4 mobile electrical probes, 1 mobile openfix probe and 2 CCD cameras (optional), the Pilot<sup>4D</sup> H4 provides the user with a total of 7 mobile test resources applicable to any point on the UUT. In addition, there are 8 fixed analog channels (optional), 16 openfix sensor channels and power resources available, which can be applied to the UUT via fixed probes positioned on the mobile, bottom-side plate. The test area can accommodate 16" x 20" boards with split test. The ATE rack can be expanded with additional analog channels, connectable to an optional external bed of nails test fixture (TPM).

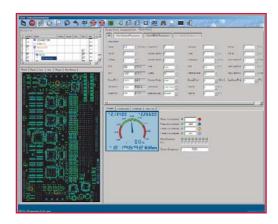
#### THE TEST TOOLS AND TECHNIQUES OF THE PILOT<sup>4D</sup> H4 INCLUDE:

- FNODE signature analysis on the nets of the UUT
- Standard analog and digital in-circuit test
- Vectorless tests (JSCAN and OPENFIX) to test ICs for opens and shorts
- PWMON net analysis for power on the boards
- Continuity test to detect open tracks on the PCB
- Visual tests for component presence/absence and rotation
- Optional functional test and boundary scan test capabilities

All of these measurement capabilities and techniques can be combined in a single test program, and the same test program can run using the flying probes or on an external bed of nails fixture, giving the user the maximum flexibility to manage changing production requirements.

## VIP PLATFORM

The Pilot<sup>4D</sup> H4 is based on the Seica VIP platform, which includes the innovative VIVA software. Test program development is organized in 3 simple steps: "Prepare", "Verify" and "Test", where the user is guided through a series of automated operations in an intuitive, self-explanatory environment, drastically reducing programming time and minimizing errors and omissions, ensuring the quality of the final test program. For special applications, the extremely open architecture of the VIP platform enables easy integration of external software modules and/or hardware, such as RS232, USB ports, GPIB and PXI/VXI protocols.



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Seica reserves the right to change the technical specifications without notice



Probes Position - Test Side	Тор
Maximum Number of Probes	5
Number of Electrical Probes	4
Number of Openfix Probes	1
Number of Fixed Probes / Upgrade Up To	8/328
Digital Embedded Channels	4
Number of CCD Color Cameras	1
Automatic Marker Recognition	Yes
Automatic UUT Planarity Compensation	Yes
Thermal Scan Module (option)	1

### **BOARD CLAMPING SYSTEM, UUT SIZES AND WORK AREA (\*)**

Board Clamping System	Manual
Active Test Area	400 x 500 mm (15.74 X 19.68")
Minimum Board Size*	35 x 35 mm (1.37 x 1.37")
Maximum Board Thickness	7 mm (0.27")
Minimum Board Thickness	0.3 mm (0.0118")
Maximum Component Height	90mm (3.57") top - 100 mm (3.93") Bottom
Board Loading	Horizontal
UUT Edge Clearance	2 mm

#### **PITCH**

Minimum Pad Pitch	200 μm (8 mils)	
Minimum Pad Size	75 μm (3 mils)	

#### **PROBE FEATURES**

Z-axis Travel	-3.0 mm to 40 mm programmable
Contact Force	25 g - 100 g programmable

#### **TESTS AND MEASUREMENTS (INSTRUMENTS DSP)**

<i>"</i>
±1 mV to ±10 V (±0.1 %)
±1 mV to ±10 V (±0.1 %)
±25mV to ±100V (±0.2 %)
±1 nA to ±0.5 A (±0.1 %)
1 Hz to 3 MHz (±1 mHz) - ±10 V max
1 Hz to 10 KHz (±10 mHz) - ±100V max
±200 μV to ±100 V
±3 nA to ±0.5 A
0.1 Hz to 10 MHz
±12 V - 500 mA - 10 MHz
1 mΩ to 100MΩ
1 pF to 1 F
1 μH to 1 H
up to 100 V (200 V option)
Yes

#### **GENERAL REQUIREMENTS**

Air Flow	0.35 CFM - 10I/min.
Temperature Range	25°C ± 10°C
Humidity	30 - 80 %
System Power	220 V/50 Hz 14 A, 110 V/60 Hz 26 A
Power Consumption	3.0 kW max
Weight	1400 kg (3087 lbs)
Length	133 cm (52.36")
Width	169 cm (66.54")
Height	170 cm (66.92") with monitor

#### SOFTWARE FEATURES

PC/Operating System	Windows 7	
Software	VIVA	
Automatic Test Generation	Yes	
Autodebug	Yes	
Data Input Format	CAD Data/Manual	

<sup>\*</sup>Universal carrier for unique board configurations.



