

PILOT **NEXT>** LINE

PILOT H4 NEXT>

The **PILOT H4 NEXT>SERIES** represents the best solution for those looking for an economic flying probe system. Equipped with 4 mobile electrical probes, 1 mobile openfix probe and 2 CCD colour cameras, the **PILOT H4 NEXT>SERIES** 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 ATE rack can be expanded with additional analog channels, connectable to an optional external bed of nails test fixture (TPM).

Available in the **Manual** and **Automatic** version. **PILOT H4 NEXT>SERIES Automatic**, thanks to its integrated SMEMA conveyor, can be combined with automatic load/unload magazines or lines, executing in-circuit, functional and visual tests of electronic boards in a completely automated mode.



The test tools and techniques include:

- FNODE signature analysis on the nets of the UUT
- Standard analog and digital in-circuit test
- Vectorless tests (Autic and OPENFIX to test ICs for opens and shorts
- PWMON Digital net analysis
- 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
- Optional ALI: Automatic Laser Inspection for presence/absence and warpage compensation: 1
- Optional LED Sensor for light intensity and colour recognition.

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.

VIVA>NEXT> Software and MES integration Option

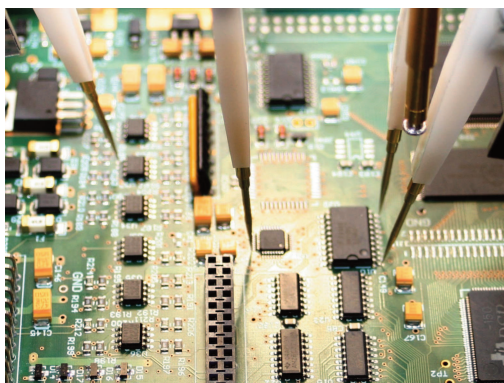
Like any other **Seica** solution, the **PILOT H4 NEXT>** test system, uses the **VIVA>NEXT>** platform, which provides two authentication methods managed through the Seica proprietary graphic editor **MY VIEW**:

1. The standard Windows authentication
2. The new 'VIVA User Authentication' through which the customer can select the user with different privileges.

Since the customer manages the production and material flow through the **MES software**, the Seica **PILOT H4 NEXT>** can be connected to the customer MES (Manufacturing Execution System). Through its proprietary Adapter, Seica can integrate all customer MES platforms.

Industrial Monitoring & Industry 4.0

The Information and technology needed to collect and analyze data, is key to the successful digitalization of the manufacturing process, which is at the heart of the **Industry 4.0** concept. Special attention needs to be given to energy savings and predictive monitoring of events. **Canavisia**, a **Seica Company**, introduces **ShoeBox**, a noninvasive control unit that allows to control energy consumption and to reduce costs and wastes through Monitoring of consumption, Data analysis, Intervention planning.



TECHNICAL TABLE



VIVA NEXT is available in a 32 and 64 bit version with a new graphical interface and a guided environment for an easy and quick test program creation. It is fully integrated with NI-VISA drivers and with third-party test management software.



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Seica reserves the right to change the technical specifications without notice

PROBES AND CAMERAS

Probes Position - Test Side	Top
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	2
Automatic Marker Recognition	Yes
Automatic UUT Planarity Compensation	Yes
Thermal Scan Module (option)	1
Led Sensor (option)	1

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

Board Clamping System	Manual <i>Manual</i> / Auto Clamp <i>Automatic</i>
Active Test Area	500 x 400 mm (19.68 x 15.74") <i>Manual</i> 610 x 538 mm (24 x 21.18") <i>Automatic</i>
Maximum Board Size	1010 x 540 mm (40 x 21.2") <i>Automatic</i>
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") <i>Manual</i> 0.5 mm (0.0197") <i>Automatic</i>
Maximum Component Height	40mm (1.57") guaranteed
Board Loading	Horizontal
Automatic Loader	SMEMA Compliant <i>Automatic</i>
UUT Edge Clearance	2 mm

PITCH

Minimum Pad Pitch	150 μ m (6 mils)
Minimum Pad Size	50 μ m (2 mils)

PROBE FEATURES

Z-axis Travel	-3.0 mm to 40 mm programmable
Contact Force	5 g - 100 g programmable

TESTS AND MEASUREMENTS (INSTRUMENTS DSP)

Voltage Generator 1 DC/AC (DRA)	± 1 mV to ± 10 V (± 0.1 %)
Voltage Generator 2 DC/AC (DRB)	± 1 mV to ± 10 V (± 0.1 %)
Voltage Generator 3 DC/AC (DRC)	± 25 mV to ± 100 V (± 0.2 %)
Current Generator DC/AC	± 1 nA to ± 0.5 A (± 0.1 %)
Waveform Generator 1 Sin, Tri, Arbitrary (DRA)	1 Hz to 3 MHz (± 1 mHz) - ± 10 V max
Waveform Generator 2 Sin, Tri, Arbitrary (DRC)	1 Hz to 10 KHz (± 10 mHz) - ± 100 V max
Voltage Measurements DC/AC	± 200 μ V to ± 100 V
Current Measurements DC/AC	± 3 nA to ± 0.5 A
Frequency Measurement	0.1 Hz to 50 MHz
Digital Embedded Channel	± 12 V - 500 mA - 10 MHz
Resistance Measurement	1 m Ω to 100M Ω
Capacitance Measurement	1 pF to 1 F
Inductor Measurement	1 μ H to 1 H
Zener Measurement	up to 100 V (200 V option)
Automatic Visual Inspection	Yes

GENERAL REQUIREMENTS

Air Flow	0.35 CFM - 10l/min.
Temperature Range	25°C \pm 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 10
Software Architecture	VIP Platform - VIVA Next>
Automatic Test Generation	Yes
Autodebug	Yes
Data Input Format	CAD Data/Manual

*Universal carrier for unique board configurations.