



PILOT NEXT> LINE

PILOT V4 NEXT>

The **PILOT V4 NEXT>SERIES** is a full-performance, double-sided, flying probe test system with an extremely high level of flexibility, making it the ideal solution for those with a wide variety of testing needs, from **prototypes** to **small/medium production volume**, through the repair of field returns and **reverse engineering**. It has a vertical architecture with two flying test probes on each side, two additional openfix probes, and two cameras (one on each side respectively). This configuration allows the **PILOT V4 NEXT>SERIES** to perform true in-circuit tests, giving full access even to boards that do not have all the test points on one side. It has the capability of placing guarding points and use all of the vectorless test techniques for ICs, with or without powering up the UUT. The reduced footprint of the **PILOT V4 NEXT>SERIES** makes it an easy fit into any work environment. The vertical, compact architecture and the excellent board clamping system ensure that there is no oscillation of the board under test, which in turn greatly facilitates the precise positioning of the probes on the test points.



The test tools and techniques include:

- FNODE signature analysis on the nets of the UUT
- PWMON digital net analysis
- Vectorless tests (AUTIC and OPENFIX), to test ICs for opens and shorts
- Continuity test to detect open tracks on the PCB
- Analog and digital in-circuit test
- Optional functional and visual test capabilities and NETLIST learning procedure used to rebuild layouts and electrical schematics of boards when the relative technical documentation is incomplete or unavailable.
- Optional Thermal Scan Resources

All of these techniques can be combined in a single test program, to achieve maximum test coverage and test throughput. The **PILOT V4 NEXT>SERIES** can be provided with a comprehensive graphic software environment for fault location and repair which can graphically display the test results (RPS module), store the history of all the tests executed (QSTAT module), and supply useful tips and information for the operator. Using the Diagnostic Expert System (DES) software, boards returned from the field can be repaired easily and quickly.

VIVA>NEXT> Software and MES integration Option

Like any other **Seica** solution, the **PILOT V4 NEXT>** test system, uses the **VIVA>NEXT>** platform, which provides two authentication methods managed through the **Seica** proprietary graphic editor **MY VIEW**: the standard Windows authentication and 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 V4 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	Front/Rear
Maximum Number of Probes	6
Number of Electrical Probes	4 (2 front, 2 rear)
Number of Openfix Probes	2 (1 front, 1 rear)
Number of Fixed Channels / Upgrade Up To	8 / 328
Maximum Digital Embedded Channels	4
Number of Colour CCD Cameras	2 (1 front, 1 rear)
Automatic Marker Recognition	Yes
Automatic UUT Planarity Compensation	Yes
Thermal Scan Module (option)	2 (1 front, 1 rear)

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

Board Clamping System	Manual
Active Test Area	(610 x 538) mm (24 x 21.18")
Maximum Board Size	(610 x 540) mm (24 x 21.25")
Minimum Board Size (*)	(20 x 20) mm (0.78 x 0.78")
Maximum Board Thickness	5 mm (0.19")
Minimum Board Thickness	0.3 mm (0.00118")
Maximum Component Height	90mm (3.57") top
Board Loading	Vertical
Automatic Loader	Not available
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 ($\pm 0.1\%$)
Voltage Generator 2 DC/AC (DRB)	± 1 mV to ± 10 V ($\pm 0.1\%$)
Voltage Generator 3 DC/AC (DRC)	± 25 mV to ± 100 V ($\pm 0.2\%$)
Current Generator DC/AC	± 1 nA to ± 0.5 A ($\pm 0.1\%$)
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 Vmax
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 100 M 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 12 A, 110 V/60 Hz 24A
Power Consumption	3 kW max
Weight	1050 kg (2315 lbs)
Length	175 cm (68.9")
Width	123 cm (48.4")
Height	203 cm (79.9")

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