# Seica
## Test Solutions

## TEST PERFORMANCES:

- **In-Circuit test**
- **Functional test**
- **Power on functional test**
- **OTPN** (One Touch Per Net)
  with Fnode to detect shorts open
  & Nodal Impedance
- **OPENFIX**
- **On-Board Programming**
- **Boundary Scan**
- **Thermal Test**
- **LED Test**
- **Probe pressure trace**
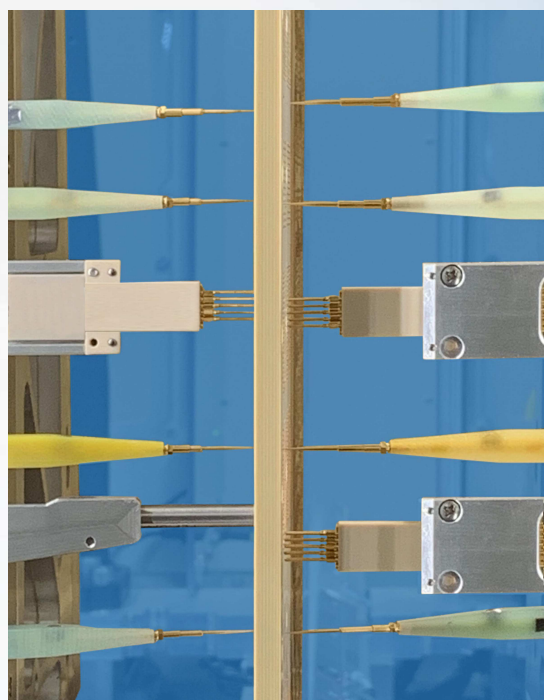  (Real time)
- **LASER warpage compensation**

**Fast**
**Powerful**
**Smart**

www.seica.com

# PILOT VX
## NEXT〉

The **PILOT VX** goes beyond the concept of number of electrical probes. The 8 heads can be configured with up to 60 probes simultaneously contacting the Board Under Test and additional features for a total of 88 resources, plus 320 fixed hybrid channels.

**VIVA NEXT〉** is available in a 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 VISA drivers and with third-party test management software.

The **PILOT VX** is equipped with several different type of test resources:

- OPENFIX Flying Probes
- Power Flying Probes
- CCD Cameras
- Thermal Scan Sensors
- LASER Sensors
- LED Sensors
- Flypods

**INDUSTRY 4.0 Ready**

**IPC CFX Compliant**

IPC-HERMES-9852

# TECHNICAL TABLE

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## PROBES AND CAMERAS

| | |
|---|---|
| Probes Position - Test Side | Front/Rear |
| Number of Heads | 8 (4 front, 4 rear) |
| Number of Z motors | 12 (6 front, 6 rear) |
| **Maximum Number of Resources:** | **88:** |
| *Electrical Probes* | *60 (30 front, 30 rear)* |
| *OPENFIX Probes* | *2 (1 front, 1 rear)* |
| *Power Probes (2A each)* | *8 (4 front, 4 rear)* |
| *Flying Pods* | *4 (2 front, 2 rear)* |
| *Stampers* | *2 (1 front, 1 rear)* |
| *LASER Sensors* | *2 (1 front, 1 rear)* |
| *Thermal Scan Module (option)* | *2 (1 front, 1 rear)* |
| *Led Sensors / Spectrum Analyzers (option)* | *4 (2 front, 2 rear)* |
| *CCD Colour Cameras* | *4 (2 front, 2 rear)* |
| Fixed Probes / Upgrade Up To | 64 (minimum upgrade) / 320 (maximum) |
| Digital Embedded Channels | 4 |
| Automatic Marker Recognition | Yes |
| Automatic UUT Planarity Compensation | Yes |

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

| | |
|---|---|
| Board Clamping System | Automatic, manual insertion possible |
| Active Test Area | 610 x 535 mm (24 x 21.06 ") |
| Board Size | 635 x 538 mm (25 x 21.18 ") |
| Minimum Board Size (*) | 45 x 45 mm (1.77 x 1.77") |
| Maximum Board Thickness | 8 mm (0.315") |
| Minimum Board Thickness | 1 mm (0.00393") |
| Maximum Component Height | 60 mm standard, up to 350 mm with special probe setup |
| Board Loading | Vertical |
| UUT Edge Clearance | 3 mm |

## PITCH

| | |
|---|---|
| Minimum Pad Pitch | 150 µm (6 mils) |
| Minimum Pad Size | 50 µm (2 mils) |

## PERFORMANCE

| | |
|---|---|
| Touch-Hits/sec | 228.6 |
| Test/sec | 166.7 |

## PROBE FEATURES

| | |
|---|---|
| Z-axis Travel | -3.0 mm (extra stroke for warpage compensation) to 60 mm programmable |
| Contact Force | 10 g to 40 g - 75 g to 150 g programmable |

## TESTS AND MEASUREMENTS (INSTRUMENTS DSP)

| | |
|---|---|
| Voltage Generator 1 DC/AC | ±1 V range, to ±10 V range 125 µV resolution (±0.1%) |
| Voltage Generator 2 DC/AC | ±1 V range, to ±10 V range 125 µV resolution (±0.1%) |
| Voltage Generator 3 DC/AC | ±100 V range, 12.5 mV resolution (±0.1%) |
| Current: Generator DC/AC | ±0.5 µA range to ±500 mA range 62.5 pA resolution (±0,1%) |
| Waveform Generator 1 and 2 | Sin, Tri, Arbitrary 1 Hz to 3 MHz (±1 mHz ) - ±10 V max |
| Waveform Generator 3 | Sin, Tri, Arbitrary 1 Hz to 10 kHz (±10 mHz ) - ±100 Vmax |
| Voltage Measurements | DC/AC ±200 µV range to ±100 V range 25 µV resolution (±0.1%) |
| Current Measurements | DC/AC ±1 µA range to 500 mA range, 122 pA resolution (±0.1%) |
| Frequency Measurement | 0.1 Hz to 50 MHz |
| Digital Embedded Channel | ±12 V - 500 mA - 10 MHz |
| Resistance Measurement | 1 mΩ to 100 MΩ, 200 µΩ with Preamp option |
| Capacitance Measurement | 25 fF to 1 F |
| Inductor Measurement | 1 µH to 1 H |
| Zener Measurement | up to 100 V (200 V and 900 V/5 mA options) |
| Automatic Visual Inspection | Yes |

## GENERAL REQUIREMENTS

| | |
|---|---|
| Temperature Range | 23 °C ± 5 °C |
| Humidity | 30% - 80% not condensing |
| Power Consumption | 3.0 kW average |
| Air Flow | 0.35 CFM - 10 l/min. |
| Weight | 1400 kg (3000 lbs) |
| Length | 1880 mm (74.00") |
| Width | 1130 mm (44.50") |
| Height | 1795 mm (70.60") |

## SOFTWARE FEATURES

| | |
|---|---|
| PC/Operating System | Windows 10 64 bit |
| Software | VIVA |
| Automatic Test Generation | Yes |
| Autodebug | Yes |
| Data Input Format | CAD Data/Manual |
| Parallel Test Capabilities | Yes |

*Universal carrier for unique board configurations.

Seica reserves the right to change the technical specifications without notice