

PinPoint IIR

The leading benchtop circuit card diagnostics & test system

PinPoint IIR Features

Test and diagnose electronic circuits quickly and reliably

The PinPoint IIR enables you to select and apply different test techniques to a single circuit, ensuring maximum fault coverage and giving you full confidence in your equipment integrity.

The PinPoint IIR gives you the following capabilities:

- In-Circuit (Dynamic and Passive)
- Digital / Analog / Hybrid
- Analog Instrumentation
- Cluster Testing
- Functional Edge Testing
- Boundary Scan
- Impedance Signature Analysis
- Reverse Engineering / Schematic Generation

Test individual components and from edge connectors

The PinPoint IIR system performs functional tests on individual components using in-circuit test methods and a fixtureless clip technique. These dynamic digital and analog tests prove the correct operation of each device and can also detect open circuit tracks or incorrect, broken, or missing passive components on networks. Tests can also be applied at the edge connector of a circuit to prove the functionality of the whole circuit.

When used for component level diagnostics, PinPoint IIR gets to the heart of a problem, minimizing PCB re-work by identifying a fault to the actual component or network, precisely and accurately. To ensure safe in-circuit testing, the PinPoint IIR conforms to stringent back-driving controls and requirements, as specified by DEF STAN 0053.

KEY BENEFITS

- Provides maximum fault coverage, accurately identifying the cause of all failures
- Supports reverse engineering of electrical circuits by generating complete diagrams, allowing you to test circuits when information is not available
- Reduces No Fault Found (NFF) by in-depth test
- Allows integration of third party options and instruments
- Significantly reduces the cost of test development
- Saves development time and money, and ensures safety
- Meets physical, environmental and electrical specifications
- Interfaces with ATML test result data to deliver precise fault diagnosis





Advanced digital and vectorless test techniques using VI analysis

In addition to the advanced dynamic digital tests, the PinPoint IIR system also utilizes a VI (impedance signature) nodal testing technique. This technique applies a sinusoidal signal to a network and learns a four quadrant signature for it. The signature is then stored and used for comparison of the network on other boards giving an instant indication of any error. The results are graphically displayed on the screen. This power-off technique can be applied to any board and is therefore ideal when little or no information is available about the device or networks being tested.

Controls PXI, USB, and GPIB instrumentation

Extending the capability of the PinPoint IIR system even further is its inherent capability to control PXI, USB, and GPIB instrumentation. Having control of these instruments through the user-friendly TestVue software allows you to create functional analog tests for your circuits.

The Instrument Strategizer gives you the capability to graphically program and sequence instruments with other code to provide a seamless, mixed-signal test

program. Additional power supplies can also be added to enhance the standard system UUT (Unit Under Test) power supplies for extended test capabilities.

Schematic Generation

The PinPoint IIR has the ability to reverse engineer a schematic diagram or netlist from an unknown circuit. This provides you with the ability to test, diagnose, and repair circuits that have been declared obsolete by the OEM (Original Equipment Manufacturers) and give you protection from obsolescence.

Powered by TestVue software

At the heart of the PinPoint IIR system is TestVue software. Renowned for its ease-of-use, this software allows you to release the full power of the hardware through a series of graphical interfaces. Interactive tutorials and manuals in the software ensure you are always supported and never more than a phone call away from help, wherever you are in the world.

CHASSIS VARIANTS

PinPoint 8 and 14 Slots

Both versions offer a flexible configuration that can be tailored to meet your requirements. Each system supports up to 240 In-circuit driver channels for analog, digital, and VI testing. With additional options to expand edge test capability, signal switching, and various instrumentation, the PinPoint IIR provides the tools you need to keep your electronics working.

SYSTEM POWER SUPPLIES

The standard UUT PSUs have the following specifications:

- •1 off+5V@30.0A
- •1 off +12V @6.0A
- 1 off-12V@4.0A
- •1 off-5V@1.0A
- •3.3V@8Amp

An internal, dual-isolated variable power supply offers 0-20 Volts at 10 Amps and is available for applications that require more than standard voltage and power.

Get Started Today

For additional details, please contact Astronics Test Systems.

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