Diagnosys

KEEPING YOUR ELECTRONICS WORKING

PinPoint UDA

Universal Design Architecture powered by TestVue™ Software

Multiple test methods for testing with confidence:

- Dynamic in-circuit
- Functional edge
- Boundary scan
- Mixed signal
- Passive analog measurement
- Functional analog
- Analog signature analysis
- Cluster test
- In-system programming
- Reverse schematic generation
- Radio frequency (RF)

diagnosys.com

UDA Architecture

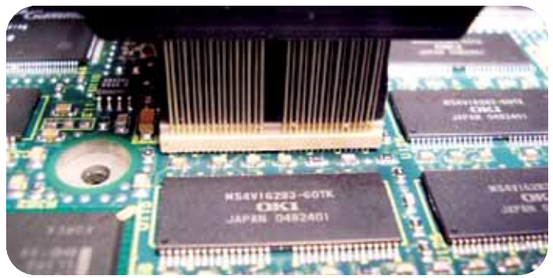
The PinPoint UDA system has been designed to provide test solutions for the challenges you see today, but has the expandability to meet the demanding requirements you will encounter in the future. Through powerful Universal Design Architecture the PinPoint UDA provides the flexibility and capability that empowers you to test modules, circuit cards and components on a single test platform.

Finding a circuit that fails is one thing, identifying the cause of the failure quickly and efficiently is quite another. The PinPoint UDA not only excels in diagnosing the cause of failures, but importantly allows you to create the test programs easily, quickly, and with proven substantial cost savings.

Based on evolutionary concepts, the PinPoint UDA design provides a modular and flexible progression of capability for you. The Universal Design Architecture enables you to choose the best no-compromise test method for your circuits to give maximum test coverage – all with rapid programming!

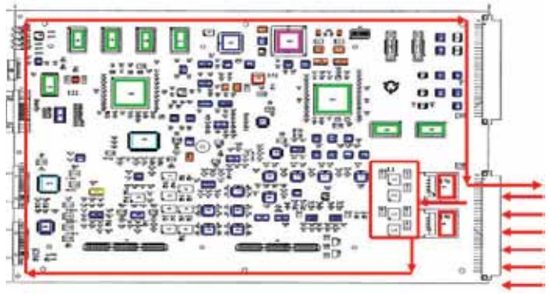
Testing through:

- Edge connectors
- Bed-of-Nails fixture
- Protocol ports - boundary scan, serial, RGB etc
- Fixtureless test adapters

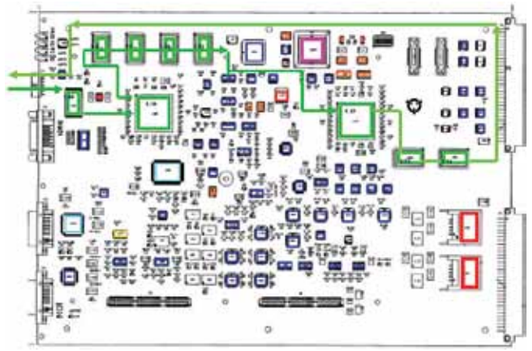


Safe To Turn On (STTO) tests

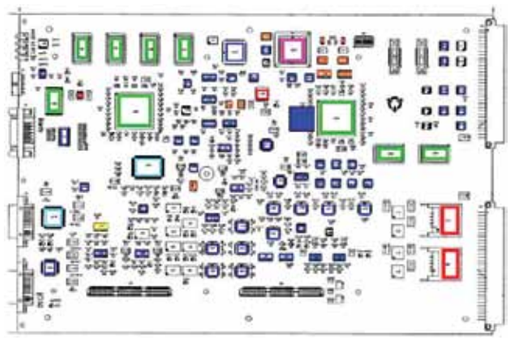
VXI Video Board primary side view



Boundary scan chain test

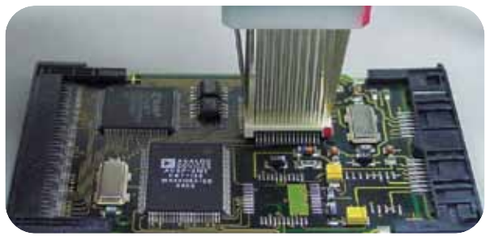


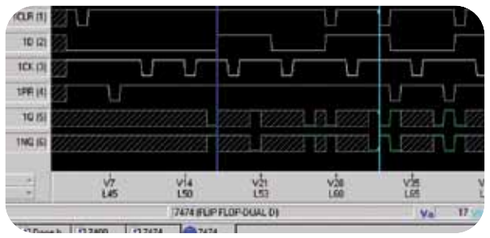
In-circuit / functional tests



(STTO):

- 1.8V Regulator FPGA
- 2.5V Regulator VCC_AUX
- 3.3V Regulator
- 1.2V Reg Virtex 4 CORE
- (+ -) 5V / (+ -) 12V





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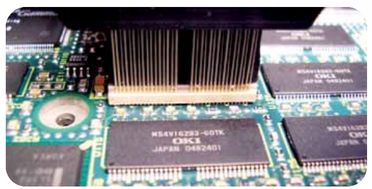


Test head configurations:

- Digital
- RF
- Instrumentation
- Power
- Common test interface standards

Developed with the military

Diagnosys has developed test strategies and products such that the diagnostic process can be achieved rapidly and accurately with negligible risk.

The PinPoint UDA system further evolves these strategies and closely integrates Go/No-Go test capability together with a powerful and flexible diagnostic tool set all within a Universal Design Architecture.

Technology, finance and time constraints mean that a test system must have powerful capability and functionality that is easy-to-use and flexible – PinPoint UDA not only meets these requirements, but in addition, makes accurate and rapid diagnostics readily available all through the proven TestVue software.

Typical Programming Time

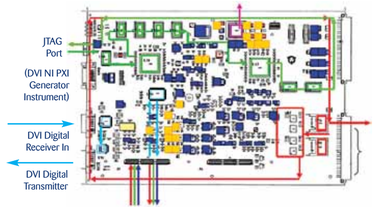
GO/NOGO | DIAGNOSTICS

Diagnostics programming with PinPoint UDA

GO/NOGO | DIAGNOSTICS

Diagnostic tool set including:

- Dynamic functional test of digital components
- Dynamic functional test of mixed signal components
- Analog signature analysis
- Passive component value measurement
- TrakTest for continuity and opens testing of tracks
- Shorts locator to identify the position of short circuits
- Boundary scan
- Shared test programs through the logistics chain
- Analog stimulus & measurements
- 3rd party instrument integration



(RGB NI PXI Generator Instrument)

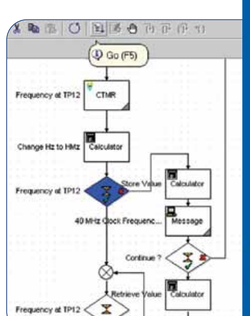
Pass with confidence

Technology today demands multiple test techniques to ensure confidence in the results. No one technique will test a complete circuit.

The PinPoint UDA system allows you to choose from the many test techniques available and structure them together seamlessly to form a complete test program in the graphic TestFlow software. Comprehensive test coverage to give you absolute confidence in your testing.

Instrument Strategizer allows you to program external instruments graphically and to create complete test sequences quickly and easily. Applying signals and measuring them becomes straight-forward allowing you to focus on the task at hand – testing your circuit.

Integrated boundary scan capability gives you the ability to test chains of JTAG enabled devices, fully checking the chain, devices and memory.



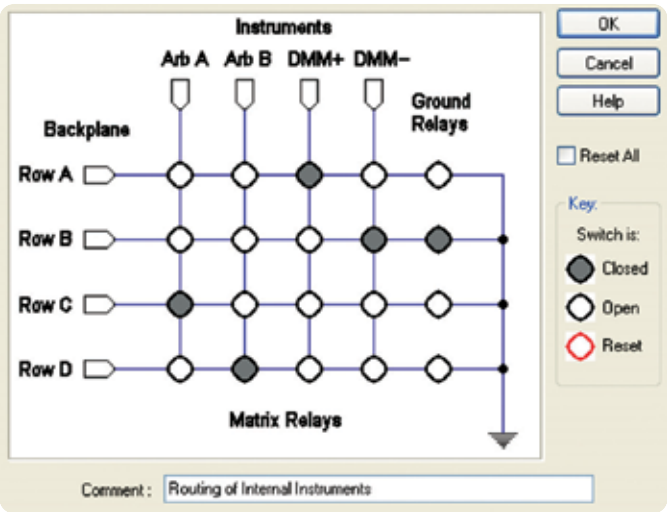
Releasing the POWER

Test System hardware and performance is naturally important and central to successfully testing any electronic circuit or module. However, unless this power is easy-to-use and readily available it never fulfils its full potential. PinPoint UDA is built on UDA (Universal Design Architecture) and powered by TestVue software.

Designed from first concepts with ease-of-use being a paramount consideration, TestVue is an integrated programming environment used across Diagnosys products giving compatibility, a common environment and shared skill sets for programming.

Powering the PinPoint UDA, the TestVue software allows the full capability and performance of the hardware to be released. Programming via the graphical environment is made even easier and faster by context-dependent menus and a maximum of 3 menu steps to reach any required functionality.

With different levels of access, users are only ever presented with relevant information, simplifying the task in hand and giving rapid learning curves.



Embracing third party technologies

The UDA provides the ability to integrate third party instrumentation via PXI, LXI or GPIB. Users have the option of developing routines through TestVue or by utilizing National Instruments Labview. Integration of 3rd party technologies provides the user with flexible comprehensive test coverage.

NATIONAL INSTRUMENTS

Best no compromise test coverage through multiple test techniques

For your local office details please visit our website: www.diagnosys.com

Document: PINPOINT/UDA/T/01

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