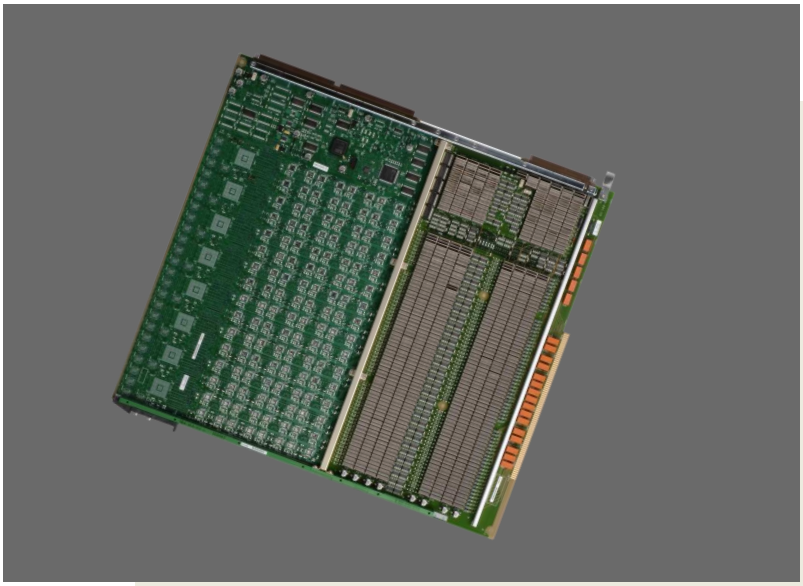
TestStation With UltraPin II

UltraPin 121a

The New Standard for Analog In-Circuit Testing

Key Features:

- *Industry leading analog test capabilities*
- *Compatible with existing TestStation™/GR228X applications*
- *TestStation scalability from analog to full digital*
- *Lower entrance price into TestStation platform*
- *Can be combined with UltraPin II 121 digital pin cards*



The UltraPin 121a provides 128 high fidelity analog pins.

With the UltraPin 121a, Teradyne has succeeded in developing an affordable analog in-circuit pin that can be mixed with the Ultra II 121 digital card for unparalleled scalability with the TestStation family without compromising other high performance pin features that users have come to expect in their ICT test systems. And like all TestStation advancements the UltraPin 121a is compatible with existing TestStation/228X programs and fixtures.

UltraPin 121a — Analog Testing Without Compromises

The UltraPin 121a pin card is a non-multiplexed pin board with 128 analog pins. TestStation LH systems configured with UltraPin 121a pin cards can support a maximum of 2048 real pins while the larger TestStation systems can be configured to support a maximum of 3840 real pins.

Unlike competitive test systems that claim to be "non-multiplexed", the UltraPin 121a offers true non-multiplexed operation without compromise. The limiting factor for analog test cards is the number of analog bus channels available for multi-wire testing and the new UltraPin 121a is set apart from the competition by offering the standard TestStation 8-wire analog system guaranteeing the available of any analog test technique at any pin. An 8-wire analog bus ensures that when needed, more accurate 4-wire testing can be performed using any tester pin, removing the need to perform analog test analysis before fixture design, improving the development process.

Additional Analog Test Capabilities

When using the UltraPin 121a one gains the full capabilities of the TestStation In-Circuit Analog (ICA) test instrument providing industry leading test accuracy, stability, and speed.

The ICA module provides stimulus and measurement facilities for detecting shorts, opens, and incorrect component values on the UUT. In-circuit measurements of resistance, capacitance, and inductance identify actual component values. Analog functional testing verifies powered component parameters such as transistor beta, op amp closed loop gain, diode characteristics, and transfer measurements. The ICA module also provides additional resources such as direct digital synthesis-based arbitrary waveform generation, full 6-wire measurement capability, synchronous sampling techniques for precise RLC measurements, and a universal 16-bit sampling DVM. The module can output drive currents of ±500 mA and can handle in-circuit test frequencies up to 100 kHz.

TestStation Performance Scalability

The TestStation platform is architected for change and scalability. As board complexity mix changes over time, system configurations can be changed to adapt to the needs of the test floor. The TestStation platform and TestStation's software make it easy to add or replace pin boards and instruments, either to expand test capability or to test a different set of boards. TestStation gives you the ability to reconfigure and scale the system over time. You can plug any instrument (analog, digital, accessory instrument) into any slot. The TestStation platform covers the test requirements for nearly all the world's boards - ranging from conventional analog test, vectorless, device programming, boundary scan, to best-in-class digital. The TestStation platform offers multiple systems and pin board technologies, so customers can optimize for performance, capacity, and capital costs to achieve lower cost-of-test. All systems can grow to deliver the full feature set of the TestStation platform.

Features of UltraPin II 121a:

- Component Measurement Capability
  - Resistive (R) Range: 0.1 to 30 Mohm
  - Capacitive (C) Range: 1pF to 10,000 µF
  - Inductive (L) Range: 10 µH to 1,000 H
- DC Voltage Source: programmable, 0 to 18V
- DC Current Source: programmable, 0 to 500 mA
- DC Voltmeter: 0 to 200 V
- DC Ammeter: 0 to 160 mA
- 120V / 50mA High Voltage Source configurable as current or voltage
  Programmable frequency from 15Hz to 100 kHz
- Arbitrary Waveform Generator
- Differential Detector/DVM/Digitizer
- External Instrument Matrix: 9 BNCs to 8-wire instrument bus
- IEEE-488 Interface Controller (/GPIB)
- Traceable Calibration Daughterboard

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Because Testing Matters

Contact your Teradyne sales representative for more information or visit www.teradyne.com/atd.

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