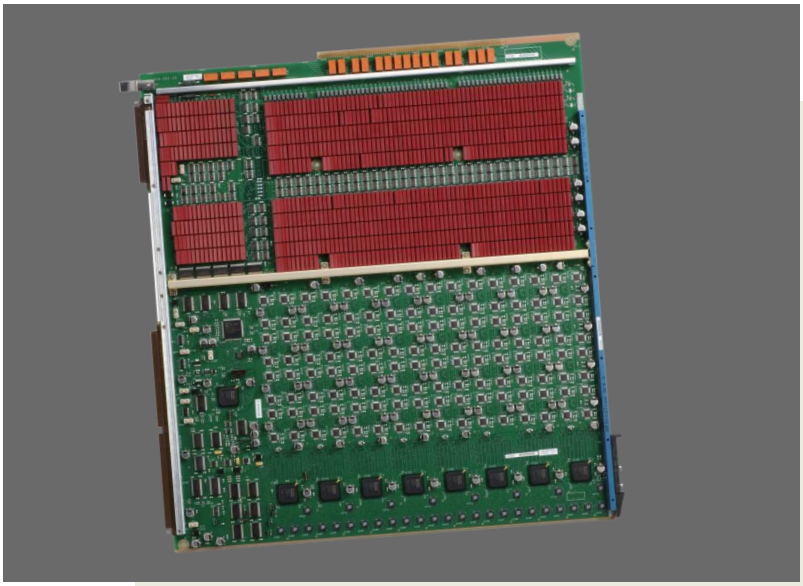
TestStation With UltraPin II

UltraPin II 121

The New Standard for Digital In-Circuit Testing

Key Features:

- *True non-multiplexing design provides faster test generation, fixture development and program debug*
- *Ultra low voltage test capability*
- *Award winning SafeTest™ Protection Technologies*
- *8-Wire Analog matrix with non-blocking 4-Wire mode*



UltraPin II is designed for safe, accurate, and reliable testing of ultra low voltage technologies.

With the UltraPin II 121, Teradyne has succeeded in developing an affordable in-circuit pin, with unique specifications for testing ultra low voltage technologies, and without compromising other high performance pin features that users have come to expect in their in-circuit test systems.

UltraPin II 121—True Non-Multiplexing Without Compromises

The Ultra II 121 pin card is a non-multiplexed pin board with 128 real pins. TestStation™ LH systems configured with Ultra II 121 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 II 121 offers true non-multiplexed operation without compromise. This is because the dimensions of multiplexing include not only the number of available drivers and sensors, but also how those driver/sensors can be used, how the analog instrument bus is designed, how many logic levels can be assigned, how many sense thresholds can be specified, whether or not pin slew rates can be programmed for each pin, and whether fixture solutions place restrictions on pin assignments. The UltraPin II 121 board has no limitations in any of these multiplexing dimensions that can cause potential program, fixture, and debug difficulties.

Unparalleled Accuracy and Performance

The 15mV drive and sense accuracy of the UltraPin II is over 13 times more accurate than most conventional ICT systems and over 6 times more accurate than the nearest competitive ICT system. The low output impedance of the driver (<.6 ohms) allows the UltraPin II to maintain its accuracy even under heavy backdriving situations. And UltraPin II is the only in-circuit pin that can measure real-time backdrive currents and set program limits to control them. This unparalleled capability makes the UltraPin II the ideal test solution for safe, accurate, and reliable testing of new and future ultra low voltage device technologies.

UltraPin II 121 - Designed for Compatibility

To protect the investments that a large number of manufacturers have made in previous generation GR228X and TS12X test fixtures and programs, the UltraPin II 121 has been designed to be compatible with these previous generation test systems. Manufacturers can be confident that their existing test programs and fixtures can be transferred to the TestStation Ultra II 121 system in a matter of minutes, with minimal effort. Teradyne's UltraPin II 121 offers true non-multiplexed operation compared to competitive ICT systems that compromise features and performance in other multiplexing dimensions in order to lower their cost of providing all real D/S pins.

The UltraPin II 121 is supported worldwide by Teradyne's global support and service organization.

Contact your Teradyne Sales Representative for more information on Teradyne's UltraPin II 121 or visit www.teradyne.com/atd.

Multiplexing Dimensions	Typical (Non-Mux) ICT	TestStation w/ Ultra II 121
Drivers and Sensors	Non-Multiplexed, all real D/S pins.	Non-Multiplexed, all real D/S pins.
Analog Instrument Bus	3 or 6 wire instrument bus with remote sensing restrictions.	8-wire instrument bus with true non-blocking 4-wire operation.
Logic Level Assignments	Single threshold with compromised fault detection.	Dual thresholds with true verification of device Vol/Voh specifications.
Slew Rate	Groups of pins must share the same logic level assignments.	Independently programmable per pin.
D/S Assignment	Not programmable. Fixed slew rate shared by all pins.	Independently programmable per pin from 100-300 V/us
Fixture Assignment	Split pin design. Extra resource required to use pin as both driver and sensor.	Dual pin design. Each pin simultaneously functions as both driver and sensor.

TestStation with UltraPin II is the only ICT system that offers "true" non-multiplexed operation

Benefits of UltraPin II 121:

- 15mV drive/sense accuracy
- 2.3mV programming resolution
- Real time backdrive current monitoring as low as 15mA
- Dual-level logic thresholds
- Per pin programmable logic assignments and slew rates
- Dedicated digital controller ensures first and repeatable application of digital test vectors (<5ns pin skew)
- Multiple timing sets allow definition of timing sequences

TERADYNE
Because Testing Matters

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

Teradyne, Inc.
System Test Group
700 Riverpark Drive
North Reading, MA 01864
U.S.A.
+1.978.370.2700
www.teradyne.com/atd

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