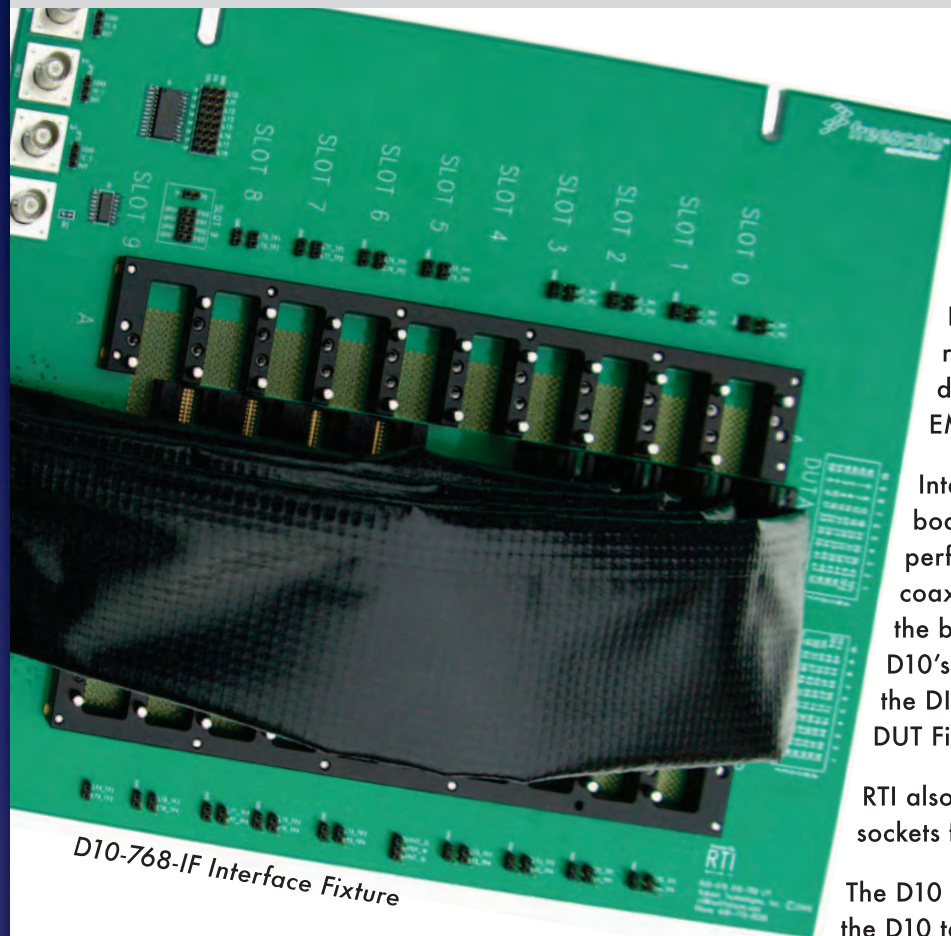


# RTI REMOTE DOCKING INTERFACE FOR CREDENCE DIAMOND D10



## PRODUCT OVERVIEW



D10-768-IF Interface Fixture

The RTI D10 Interface and DUT Fixture is designed to allow testing of devices remote from a Credence Diamond D10 test system. The RTI system is designed to be upgradeable from 96 to 768 channels, in increments of 96. All power supplies, sense lines, and most DIBU signals can be accessed at the remote DUT board. The DUT Fixture is designed to fit on probe stations, LSM, EMMI and other diagnostic tools.

Interface to DUT cards (performance boards) are made through high-performance pogo pins. RTI's high-speed coaxial ribbon cables mount directly on the bottom side of the pogo pins. All of the D10's sixteen power supplies and most of the DIBU functions are also available at the DUT Fixture.

RTI also supplies custom DUT cards and test sockets for the system.

The D10 Interface Fixture plugs directly onto the D10 test system. All test channels maintain 50 ohm impedance throughout the system.

### RTI INTERFACE FIXTURE D10-768

The RTI D10 is 10"x12". It is field upgradeable from 96 to 768 pins in increments of 96 pins by adding additional D10 Pogo Blocks (D10-96PPB-IF) and cables (RTI-96HS-C).

All Molex connectors required for up to 786-channel

operation are pressed into the interface PCB in slots 0-9 DUT A and DUT B and slot 9 DUT C.

Users can contact each signal pin on the DUT A and DUT B connectors for slot 0 through 9 using option Pogo Pin Access Blocks (D10-PP-ACCESS).

#### Cables from Interface Fixture to Remote DUT Fixture

- ◆ There are provisions for up to eight Pogo Pin Blocks (D10-96PPB-IF) and eight RTI 96 Channel High Speed Coaxial Ribbon Cables (RTI-96HS-C)
- ◆ There are two Power Supply Cables (D10-PS-C) for all 16 power supplies and sense lines.
- ◆ There are two DIBU ribbon cables (D10-DIBU-C1 and D10-DIBU-C2 )

#### Additional Test Points on the Interface Fixture

- ◆ DUT A SCOPE\_TP2 (8 total) (.100 headers)
- ◆ TP1 for each DPIN card (3V signal) used for pass/fail flags (8 test points total) are used to create a global pass / fail flag.
- ◆ DUT B SCOPE TP (TP3, TP4) (16 total test points) (.100 headers)
- ◆ DIBU DUT A (8) SCOPE\_TP - (.100 headers)
- ◆ DIBU DUT A (8) GPIO pins - (.100 headers)

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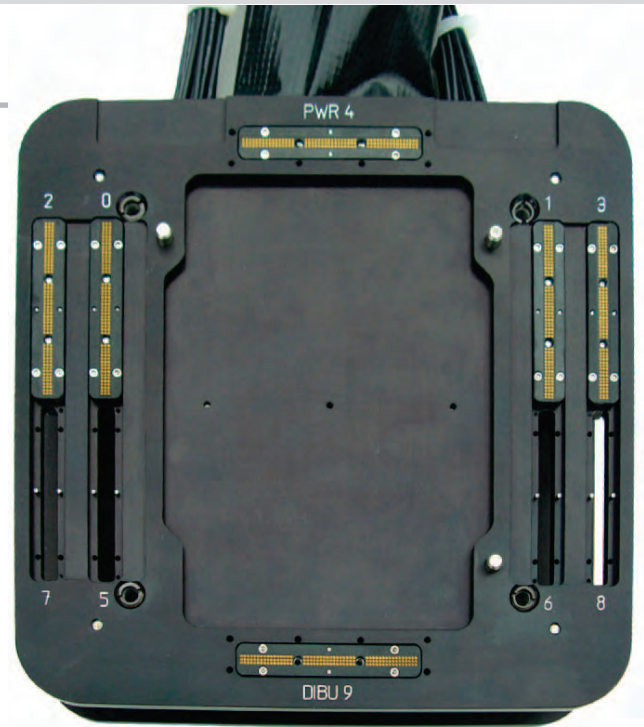
## RTI DUT FIXTURE D10-768-DF

### Physical Dimensions

- ◇ 9.5 inches x 9.5 inches by 2.1 inches high (not including height of alignment pins)

### General Specifications

- ◇ All connections to the DUT board are made through the pogo pin blocks, including up to 768 test channels, Sixteen D10 power supplies and references, and connections to the DIBU channels.
- ◇ The DUT Fixture is designed to fit on probe stations, LSM, EMMI and other remote diagnostic tools.
- ◇ The DUT Fixture is field upgradeable from 96 to 768 pins in increments of 96 by adding additional pogo blocks (DB-96PPB-DF) and required cables.
- ◇ The Power Supply cables (RTI-96HS-C) attach to a small PCB that interfaces to the power supply pogo block.
- ◇ The DIBU ribbon cables (D1-DIBU-C1 and D1-DIBU-C2) attach to a small PCB that interfaces to the DIBU pogo pin block.



D10-768-DF Dut Fixture

## CABLE AND POGO PIN BLOCKS

### RTI 96 Channel High Speed Cables (RTI-96HS-C)

- ◇ The RTI 96 Channel High Speed Ribbon cables interface directly to the pogo pin blocks on the Interface Fixture and the DUT Fixture.
- ◇ The cables are constructed using a controlled impedance gold plated Ridged-Flex PCB connecting six 50 ohm coaxial ribbon cables (16 channels each).
- ◇ A cover protects the ribbon cables and adds additional strain relief.
- ◇ The cables are designed to be approximately 34 inches from the edge of interface board to the edge of DUT fixture. The cables are the same length and fully interchangeable.

### Pogo Pin Blocks

- ◇ There are 2 Types of Pogo Pin Blocks used in the system. Both Pogo Pin blocks use the same high performance RTI L6-716 pogo pin. The blocks are similar in appearance but are not interchangeable.
- ◇ D10 Interface Pogo Pin Blocks: D10-96PPB-IF
- ◇ DUT fixture Pogo Pin Blocks: D10-96PPB-DF

### Pogo Pins (RTI L6-716)

- ◇ Current Rating: 5A
- ◇ Inductance: less than 1.0nH
- ◇ Insertion Loss: -1dB at 3.0GHz