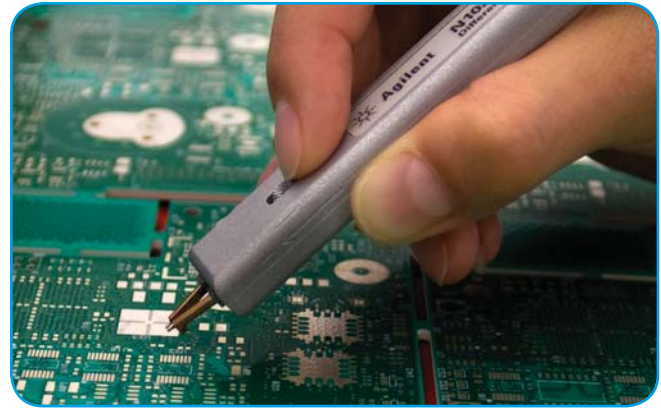


# Agilent N1021B 18 GHz Differential TDR Probe Kit

Get connectivity to printed circuit boards and other devices without connectors

- **Shorten design cycles:** Characterize differential impedances including return and insertion losses
- **Get better insights:** display results in the time domain (impedance profiles) or frequency-domain (SDD11, SDD21)
- **Control processes:** Maintain consistent quality in printed circuit board and passive component manufacturing



The Agilent N1021B TDR 18 GHz differential TDR probe kit connects printed circuit boards and other devices without connectors to the 54754A differential TDR/TDT module in the 86100C Infiniium DCA-J wideband oscilloscope mainframe. In conjunction with these hardware components, engineers can use the optional 86100C-202 enhanced impedance and S-parameter software to accurately characterize differential impedances in the time- and frequency domains (for example, reflections and impedances versus time or distance, or magnitude/phase/group delay of S-parameters like SDD11/SDD21).

## Superior Probe Usability:

- Differential probe body. The tips move independently in order to make good electrical contacts even if the probe is not held perfectly perpendicular.



- A light, ergonomic design combined with flexible cables feels comfortable even when used extensively.
- The slim body and the extended tips provide good visibility of the target.



- Hardened tips ensure many touchdowns. Their small diameter and chamfered design make good contact even on small pads or traces.
- A thumb wheel allows pitch adjustments with just one hand.



## Key Characteristics/Features:

- Bandwidth 18 GHz
- 100 Ohm nominal differential impedance
- Variable tip spacing: 0.5mm-2.54mm
- Spring loaded probe tips with independent Z-axis movement

## N1021B Kit Content:

- Differential TDR Probe Body
- Matched Cables – 1 m (N1021-60003)
- 2 Male Shorts (0960-0055)
- 2 Male Loads (1810-0118)
- 2 F-F Adapters (1250-1666)
- 1 Adapter to positioners (N1021-60008)
- ESD Wrist Band (9300-0980)
- ESD Wrist Band Cord (9300-0980)
- ESD/EOS Labels - Multi-lingual
- Custom Storage Box

Part numbers in parentheses also available as spare items from [www.agilent.com](http://www.agilent.com) (search for "Parts").



**Agilent Technologies**

Based on the industry-standard 86100C Infiniium DCA-J Oscilloscope platform Agilent's TDR/TDT solutions provide major benefits:

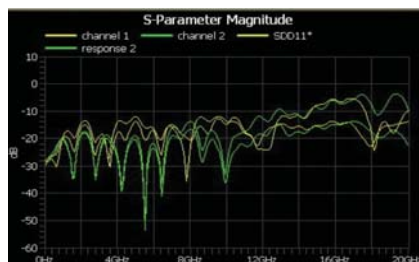
- **Ease of use:** Visual on-screen guides help occasional users to make good measurements without slowing down power users



- **TDR calibration:** TDR calibration based on shorts and loads improves accuracy by de-embedding the cable losses between instrument and the DUT.
- **Variable risetime:** TDR calibration also allows users to mathematically decrease the effective risetime to less than 20 ps or increase it up to 1 ns in order to match the edge speeds of the target application.



- **Live S-parameter:** Magnitude, phase and group delay are live onscreen – no external SW required. Any changes or DUT tuning can be instantly observed.



**Other TDR/TDT Accessory:**



**86100C-202 Enhanced Impedance and S-Parameter Software**



**N1020A 6 GHz Single-ended TDR Probe & Positioner**



**N1024B Cal Kit (for DUTs with SMA/3.5 mm connectors)**

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Product specifications and descriptions in this document subject to change without notice.

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