# **Tektronix**<sup>®</sup>

# **Tektronix Logic Analyzer Probes**

P5900 Series Datasheet



Verification and debug of today's high speed digital signals requires probing solutions that can accurately acquire from a wide variety of electronic designs and protect signal fidelity. Tektronix logic analyzer probes contain a variety of connectivity options that are engineered to ensure that signal acquisition is a true reflection of your design's performance.

#### Key features

- Low total capacitive loading minimizes intrusion on circuits
- 20 kΩ input resistance
- 7.5 V<sub>p-p</sub> dynamic range supports a broad range of logic families
- Variety of attachment mechanisms including the high-density D-Max<sup>®</sup>, Mictor, square pins, and flying leads.

#### Applications

- Digital hardware validation and debug
- Monitoring, measurement, and optimization of digital hardware performance
- Embedded software integration, debug, and verification

# Leading probe solutions for real-time digital systems analysis – P5900 series probes

No test and measurement solution is complete without probing and the consideration of its impact on your system and your measurement time. With the industry's lowest probe loading, the P5900 Series logic analyzer probes protect the integrity of your signal - minimizing the impact on your design. The P5900 Series logic analyzer probes when used with TLA6400 Series logic analyzers make sophisticated logic analysis available at an affordable price. Select from a variety of attachment mechanisms, including the high-density D-Max<sup>®</sup>, Mictor, and general-purpose.



P5910 17-channel general purpose probe

The 17-channel P5910 provides flexible general-purpose probing, with support for 0.100 in. and 2 mm pin spacing, low input capacitance, and accessories for connecting to many industry-standard connections.



P5960 34-channel D-Max probe

For applications where circuit board space is limited, the 34-channel highdensity P5960 D-Max offers the smallest available footprint and a quick connection mechanism.



P5934 34-channel Mictor probe

The P5934 is 34-channel mictor probe with quick connect/disconnect and a positive-latching mechanism to ensure a secure, reliable connection.

## Specifications

All specifications apply to all models unless noted otherwise.

Compatible with TLA6400 series logic analyzers

	P5910	P5934	P5960
Probe type	Single-ended Data Single-ended Clock (General purpose)	Single-ended Data Single-ended Clock (Mictor 34-channel)	Single-ended Data Single-ended Clock (D-Max <sup>®</sup> Probing Technology)
Number of channels	17	34	34
Recommended use	Most general-purpose applications	Applications requiring many channels to be connected quickly in a small footprint	High-performance applications requiring many channels to be connected quickly in a small footprint
Attachment to target system	Fits both 0.100 in. and 2 mm square pin configurations	Amp Mictor 34-channel connector	D-Max <sup>®</sup> probing technology compression cLGA

#### P5900 probe specifications

Input resistance	20 k $\Omega$ to ground, typical
Input capacitance	
P5910	1.3 pF
P5934	2.0 pF
P5960	0.8 pF
Minimum digital swing	300 mV
Analog bandwidth <sup>1</sup>	2 GHz
Cable length	
P5910	1.5 m (5 ft.)
P5934	1.2 m (4 ft.)
P5960	1.5 m (5 ft.)

<sup>1</sup> Analog bandwidth of P6960 is less with the flying lead set attached.

## Ordering information

Model	Description
P5910	17-channel General-purpose probe with single-ended Data/Clock, separable podlets, and accessories <b>Includes</b> : podlet holders, IC grabbers, ground leads, ground tips, extension ground tips, probe labels
P5934	34-channel high-density Mictor probe with single-ended Data/Clock and accessories Includes : latch housing assembly (edge-mount), latch housing assembly (vertical), probe labels
P5960	34-channel high-density D-Max <sup>®</sup> Probing Technology Probe with single-ended Data/Clock and accessories Includes : probe head protective cover, probe retention kit for D-Max <sup>®</sup> Probing Technology, probe labels

## **Probe options**

#### Language options

Opt. L0	English manual
Opt. L99	No manual

#### Service options

Customers who choose a Tektronix product receive a support partnership focused on making the deployment and operation of their products successful. Tektronix support teams are committed to providing rapid response. A broad range of flexible services is available at the time of product purchase to meet customer service needs.

The following service options are offered for the P5900 logic analyzer probes.

Opt. C3	Calibration Service 3 Years
Opt. C5	Calibration Service 5 Years
Opt. R3	Repair Service 3 Years (including warranty)
Opt. R5	Repair Service 5 Years (including warranty)

### **Standard accessories**

#### P5910

335-2736-xx	Sheet of probe labels
020-2622-xx	Probe accessory kit provides different means to connect the logic analyzer probe to the SUT.
P5934	
335-2738-xx	Sheet of probe labels
105-1088-xx	Latch housing assembly, edge-mount
105-1089-xx	Latch housing assembly, vertical

#### **Standard accessories**

#### P5960

335-2737-xx	Sheet of probe labels
202-2908-xx	Probe retention kit for D-Max $^{\!(\!8\!)}$ Probing Technology (contains 2 retention shrouds)

## **Recommended accessories**

#### P5910

020-2622-xx	Probe accessory kit provides different means to connect the logic analyzer probe to the SUT
020-2711-xx (20 included)	20 Extension ground tips
131-5638-xx (20 included)	Probe tip
020-2733-xx (20 included)	IC grabber
020-2712-xx (8 included)	3-inch ground lead set
020-2713-xx (2 included)	8-inch ground lead set
352-1115-xx (2 included)	Probe grouper
P5934	
131-6134-xx	AMP Mictor Connector, Surface-Mount
020-2228-xx (21 included)	AMP Mictor Connector, Surface-Mount
020-2456-xx	Compression-on-PCB to Mictor Adapter, 34 channel
P5960	
020-2910-xx (50 included)	Probe retention kit for D-Max <sup>®</sup> Probing Technology
020-2539-xx	Post-style probe retention kit for D-Max <sup>®</sup> Probing Technology



Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

#### Datasheet

**Standard accessories** 

ASEAN / Australasia (65) 6356 3900 Belgium 00800 2255 4835\* Central East Europe and the Baltics +41 52 675 3777 Finland +41 52 675 3777 Hong Kong 400 820 5835 Japan 81 (3) 6714 3010 Middle East, Asia, and North Africa +41 52 675 3777 People's Republic of China 400 820 5835 Republic of Korea 001 800 8255 2835 Spain 00800 2255 4835\* Taiwan 886 (2) 2722 9622 Austria 00800 2255 4835\* Brazii +55 (11) 3759 7627 Central Europe & Greece +41 52 675 3777 France 00800 2255 4835\* India 000 800 650 1835 Luxembourg +41 52 675 3777 The Netherlands 00800 2255 4835\* Poland +41 52 675 3777 Russia & CIS +7 (495) 6647564 Sweden 00800 2255 4835\* United Kingdom & Ireland 00800 2255 4835\* Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777 Canada 1 800 833 9200 Denmark +45 80 88 1401 Germany 00800 2255 4835\* Italy 00800 2255 4835\* Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90 Norway 800 16098 Portugal 80 08 12370 South Africa +41 52 675 3777 Switzerland 00800 2255 4835\* USA 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tektronix.com.

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