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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E5378A

Keysight E5378A 100 Pin Samtec Single Ended Logic Analyzer Probe The Keysight E5378A is a 34-channel single-ended Samtec probe for quick connection to many channels in a small footprint. It supports differential or single-ended clocks with single-ended data at up to 1.5 Gb/s, 250 mV peak-to-peak minimum amplitude, and 1.5 pF input capacitance. High-speed single-ended bus capture on targets with designed-in 100-pin Samtec connectors for 90-pin class logic analyzers. Thirty four channels 32 data plus 2 clocks The Keysight E5378A is a 34-channel single-ended Samtec probe for quick connection to many channels in a small footprint. It supports differential or single-ended clocks with single-ended data at up to 1.5 Gb/s, 250 mV peak-to-peak minimum amplitude, and 1.5 pF input capacitance. High-speed single-ended bus capture on targets with designed-in 100-pin Samtec connectors for 90-pin class logic analyzers. Thirty four channels 32 data plus 2 clocks Two hundred fifty mV p-p minimum amplitude



MODEL

**Agilent / Keysight
E5378A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E5378A

LISTING

<https://aumictechlabs.com/products/e5378a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E5378A is a 34-channel logic analyzer probe for high-density target systems, delivering single-ended signal acquisition with minimal loading effects. The probe integrates 32 data channels plus 2 configurable clock channels (single-ended or differential) and connects via a 100-pin Samtec surface mount connector to compatible logic analysis modules.

Data capture rates reach 1.5 Gb/s with sensitivity to signals as low as 250 mV peak-to-peak, making it suitable for low-voltage signal environments. The probe's equivalent load capacitance of 1.5 pF minimizes impact on target circuitry.

Technical Specifications

Channels: 34 total (32 single-ended data + 2 single-ended or differential clock)

Maximum data rate: 1.5 Gb/s

Minimum signal amplitude: 250 mV peak-to-peak

Equivalent load capacitance: 1.5 pF

Connector: 100-pin Samtec surface mount

Logic analyzer connector: 90-pin cable interface

Key Features

- Small surface mount footprint for dense PCB integration
- Minimal capacitive loading via 1.5 pF design
- Optional conductive metal support shrouds for board thicknesses up to 0.12 inches
- Accepts probing connector kits (e.g., Agilent 16760-68702 or 16760-68703) with mating connectors and support shrouds
- Low-voltage signal detection without external amplification

Compatibility & Integration

The E5378A requires a 100-pin Samtec connector integrated into the target system board. Recommended connector part numbers include Keysight 1253-3620 or Samtec ASP-65067-01. The probe is compatible with Agilent/Keysight logic analysis modules 16753A, 16754A, 16755A, 16756A, and 16760A, all equipped with 90-pin cable connectors.

Product Status: Obsolete

E5378A Characteristics / Specifications

PARAMETER	VALUE
Model	E5378A
Instrument Type	single ended Samtec logic analyzer probe
Channel Count	34
Data Channels	32
Clock Channels	2
Clock Signal Types	differential or single ended
Data Signal Type	single ended
Maximum Data Rate	1.5 Gb/s
Minimum Signal Amplitude	250 mV peak to peak
Input Capacitance	1.5 pF
Target Connector	100 pin Samtec
Probes Required Per U4201A Cable	1
Mating Kit Thin Board	kit of 5 shrouds and 5 Samtec connectors up to 1.57 mm
Application Class	quick connection many channels small footprint
Compatible Soft Touch Contrast Capacitance	less than 0.7 pF
Sibling Differential Probe Model	E5379A
Sibling Differential Channels	17
Sibling Mictor Model	E5380B
Sibling Mictor Max Rate	600 Mb/s
Sibling Flying Lead Capacitance Class	0.9 pF E5381B class
Analyzer Mapping Adapter Class	E5386A even channel mapper supported
Maximum Capture Class	up to 1500 Mb/s stated in 16760A probing chapter
Threshold Reference Inputs Class	two data threshold references one per pod of 16
Data Rate	1.5 Gb/s

E5378A Specifications

PARAMETER	VALUE
Applications	High-speed single-ended bus capture on targets with designed-in 100-pin Samtec connectors for 90-pin class logic analyzers.
Key Features	Thirty four channels 32 data plus 2 clocks
One point five Gb/s maximum data rate	Two hundred fifty mV p-p minimum amplitude
One point five pF input capacitance	Requires 100-pin Samtec connector on the target
Technical Specifications	Model: E5378A
Notes	Numeric rows from Keysight Probing Solutions for Logic Analyzers datasheet Samtec probe tables and E5378A section.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

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30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.