

LOGIC ANALYZERS

Digitizing Oscilloscope Module

HP 16532A

HP 16532A Digitizing Oscilloscope Built-In, Full-Featured Digitizing Oscilloscope

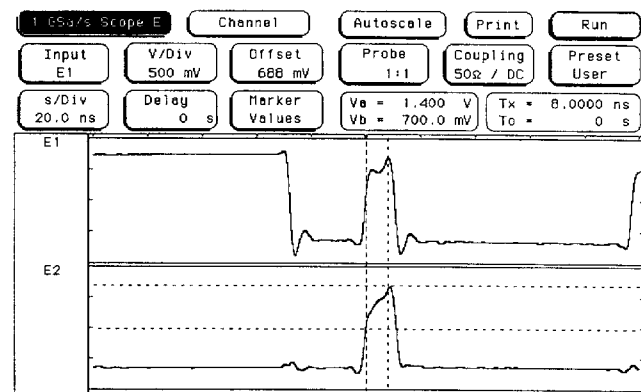
The HP 16532A offers the advantages of a full-featured color digitizing oscilloscope integrated into your logic analyzer. The HP 16532A offers digitizing advantages such as autoscale, automatic measurements, powerful triggering, negative-time viewing, voltage markers, and time markers.

Key Specifications and Characteristics

	HP 16532A
Sample rate	1 GSa/s
Bandwidth ¹	250 MHz
Rise time ²	1.4 ns
Time interval accuracy	± 150 ps
ADC resolution	8 bits
Waveform record length	8000
Channels per card	2
Max. single time base channels	8
Max. channels per system	20

Use as a Standalone Scope with Many Channels

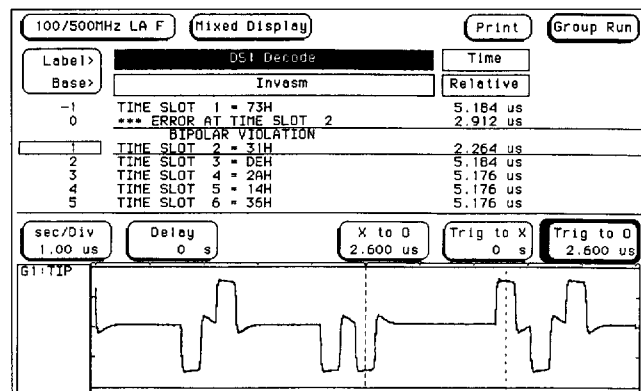
You can capture up to eight analog channels simultaneously (single time base). You can measure slow and fast events by adding additional oscilloscope modules to create a multiple time base digitizing oscilloscope. For large channel count measurements, you can configure as many as 20 HP 16532A scope channels in a single system.



Simultaneously view up to eight channels—individually or overlaid—to observe timing relationships.

Combine Scope with Other Logic Analysis Modules

You can arm or trigger the oscilloscope from any other module in the HP 16500 series to capture and display the analog events that affect your digital system.



The state analyzer armed the built-in scope to capture a hard-to-find DS1 bipolar violation.

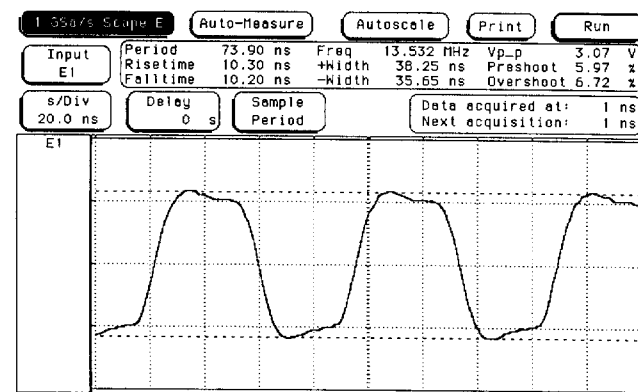
Autoscale, Auto-Measure, Voltage and Time Markers, and Color Save You Time

Select Autoscale and the scope adjusts the time, voltage, and trigger levels instantly for a stable display of your waveforms. Use automatic measurements to analyze a signal's behavior easily. Independent voltage and time markers can be used to measure voltage and timing relationships. Plus, automatic marker placement and statistics allow you to characterize a circuit quickly.

Waveforms are independently colored for fast and easy identification.

Automatic Measurements Display

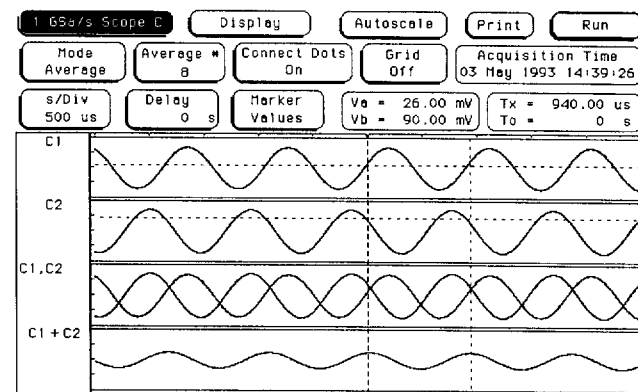
Period	Frequency	Peak-to-peak voltage
Rise time	+ Pulse width	Preshoot
Fall time	- Pulse width	Overshoot



Automatic measurements quickly identify a signal's parameters.

Flexible Display Modes Help You Find Signal Problems

Capture random signal variations or metastable states with the accumulate mode. Filter out noise with the average mode. Show true single-shot events with the single mode. Scan many periods of the waveform easily with the connect-the-dots feature. Analyze differential waveforms with the A-B mode.



Waveform math functions show relationships between measured signals.

Key Literature

1 Gigasample/Second Oscilloscope Module for the HP 16500 Logic Analysis System, p/n 5091-0598 EUS.

¹Specifications

²Rise time is calculated from: Rise time = 0.35/bandwidth