

KEYSIGHT TECHNOLOGIES (AGILENT HP)

1663C

The Keysight (Agilent/HP) 1663C is a 34-channel benchtop logic analyzer designed for digital hardware debugging and system integration. It features 100 MHz state speed, up to 500 MHz timing analysis speed on half channels, a built-in 9-inch monochrome CRT, and support for HP-IB and RS-232C interfaces.

SPECIFICATIONS

General

Interfaces	HP-IB (GPIB), RS-232C, Centronics parallel printer port
Display	9-inch monochrome CRT, 640 x 350 pixels

Physical

Power Supply	115/230 V AC (+10%/-25%), 48-66 Hz, 200 W maximum
Operating Temperature	0 to +55 °C °C
Dimensions (W×H×D)	425 mm x 198 mm x 366 mm mm
Weight	11.8 kg

Logic Analysis Channels

Number of Channels	34
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State Analysis

Maximum State Analysis Speed	100 MHz
State Clocks	2
Setup/Hold Time Window	3.5 ns
Minimum State Clock Pulse Width	3.5 ns

Timing Analysis

Maximum Conventional Timing Rate	250 MHz
Maximum Conventional Timing Rate (Half Channel)	500 MHz
Maximum Transitional Timing Rate	125 MHz
Maximum Transitional Timing Rate (Half Channel)	250 MHz
Minimum Glitch Detection Width	3.5 ns

Memory

Memory Depth per Channel	4,096 samples
Memory Depth per Channel (Half Channel)	8,192 samples

Probe Input

Input Impedance	100 k Ω 8 pF
Input Dynamic Range	± 10 V
Minimum Input Voltage Swing	500 mV p-p
Threshold Range	-6.0 V to +6.0 V (TTL, ECL, CMOS, User-Defined)
Threshold Accuracy	$\pm(100$ mV + 3% of threshold setting)
Threshold Resolution	50 mV

Storage

Floppy Disk Drive	3.5-inch 1.44 MB (MS-DOS compatible)
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Environmental

Storage Temperature Range	-40 to +75 °C
Operating Altitude	Up to 4,600 m (15,000 ft)
Non-Operating Altitude	Up to 15,300 m (50,000 ft)
Relative Humidity Range	Up to 90% non-condensing at +40 °C

Logic Analysis

Number of Pods	2
Data Channels	32
Clock Channels	2

Triggering

Trigger Sequence Levels	12
Pattern Recognizers	10
Range Recognizers	2
Edge/Transition Recognizers	2
Trigger Macros	14

Inputs & Outputs

External Trigger Input	BNC, Rin $\approx$ 3.2 k Ω , Max input ± 15 V
External Trigger Output	BNC, VOH $\geq$ 2.0 V into 50 Ω , VOL $\leq$ 0.4 V into 50 Ω
Target Control Port	8-pin mini-DIN, 8 open-collector outputs
Video Output Port	15-pin D-sub (VGA)
Maximum Probe Input Voltage	± 40 V peak
Standard Probe Model	HP 10474A

Data Storage

File System Support	MS-DOS, LIF
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Display

Display Resolution	640 x 480 pixels
Display Type	9-inch monochrome CRT

Software & Control

Command Language	SCPI
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TECHNOLOGY

Logic Analyzer

APPLICATIONS

Embedded Systems Debugging, Digital Circuit Verification

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.