

KEYSIGHT TECHNOLOGIES (AGILENT HP)

16522A

The Keysight Technologies (formerly Agilent HP) 16522A is a high-performance 200 MHz digital pattern generator module designed for functional digital design testing. Compatible with Agilent 16500 and 16700 series logic analysis system mainframes, this module allows engineers to simulate real-world stimuli, run design qualification tests, and check system responses to unexpected signals or clock speeds, reducing the need for custom test hardware.

SPECIFICATIONS

Physical

Power Supply	Powered by mainframe backplane
Operating Temperature	0 to +55 °C °C
Weight	1.4 kg kg

Stimulus & Pattern Generation Performance

Maximum Clock Rate	200 MHz
Number of Channels per Module	20 channels (at 200 MHz clock) or 40 channels (at 100 MHz clock)
Memory Depth per Channel	258,048 vectors
Maximum Vector Width	Up to 200 bits wide (via multi-module configurations)
Compatible Logic Levels	TTL, 3-state TTL/3.3V, 3-state TTL/CMOS, ECL terminated, ECL unterminated, differential ECL (with pod)

Timing & Clocking

Clock Output Delay Range	11 ns in 9 steps (using clock pod)
Clock Input Range	DC to 200 MHz (using clock pod)
Internal Clock Period Range	5 ns to 250 µs
Internal Clock Period Sequence	Programmable in a 1, 2, 2.5, 4, 5, 8 sequence
External Clock Frequency Range	DC to 200 MHz
External Clock Minimum High Time	2 ns

Sequencing & Triggering

Maximum Number of Different Macros	100
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Physical & Mainframe Integration

Module Slot Width	1 slot
Compatible Mainframes	HP / Agilent 16500B, 16500C, 16700-series

Power Requirements

+5 V Current Draw	5.5 A
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Accessories

Compatible Clock Pods	10460A, 10463A, 10468A
Compatible Data Pods	10461A, 10462A, 10464A, 10465A, 10466A, 10469A
Compatible Lead Sets	10474A

Sequence Control

Maximum Loop Nesting Levels	4
Maximum Loop Repeat Count	4096
Maximum Vector Repeat Count	4096
Wait Line Inputs	3

Power

Data Pod Power Supply	+5 V, 1 A max per pod pair
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TECHNOLOGY

Digital Pattern Generation

APPLICATIONS

Functional testing of digital designs and system stimulus

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