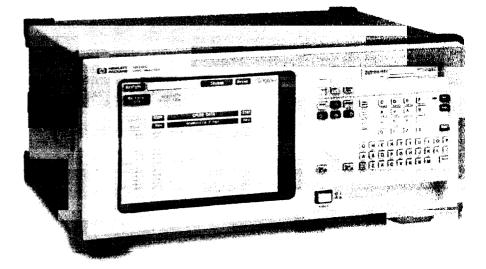
418 **HP 1670G Series Benchtop Logic Analyzers**

HP 1670G HP 1671G HP 1672G HP 1673G

- **HP 1664A**
- . Tailor cost-effective solutions to match your specific application
- Simplify capture and analysis of complex events with up to 2M deep memory
- View analog and digital signals simultaneously with the optional twochannel, 500 MHz oscilloscope
- Stimulate circuits and simulate missing components with the optional pattern generator capability

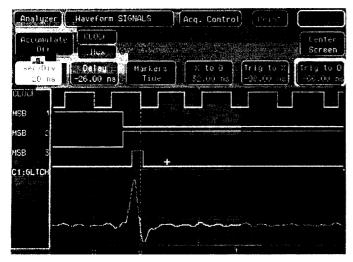


Get Personalized Power with a Logic Analyzer **Built for Your Unique Needs**

The HP 1670G Series logic analyzers offer cost-effective 135 MHz state analysis and timing analysis at speeds up to 500 MHz. The high-speed acquisition memory can be configured for depths up to 2M samples over as many as 136 acquisition channels. An optional 2-channel, 500 MHz oscilloscope or a 32-channel pattern generator capable of up to 200 MVector/s can be added to the unit to customize it for signal integrity or stimulus-response applications. Never before has so much measurement power been available in such an affordable package.

You'll make productive use of all the measurement power, too. A commonsense user interface helps you solve your design problems faster, and the ability to view processor mnemonics and waveforms simultaneously makes it easier to see cause/effect relationships in your system. Navigating through the user interface is made simple via a choice of either mouse or front-panel operation. An optional keyboard is also available. The color flat-panel display will help you find information quickly.

Graphical trigger macros assist in making powerful measurements. Trigger setups can be selected from a categorized list of trigger macros. Each macro is shown in a graphical form and has a written description. Macros can be chained together to form a custom trigger



Optional built-in oscilloscope allows correlation of timing, state, and analog signals, to facilitate identification of glitches

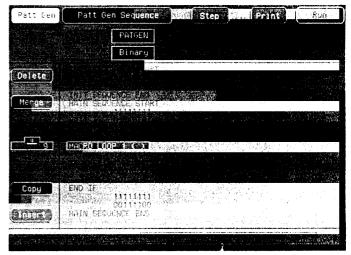
An Excellent Toolset for Hardware Development

Some of the tougher hardware problems can be found only with the digital triggering capabilities of a logic analyzer and solved only with the analog resolution of an oscilloscope. That's why a built-in, 500 MHz, 2-Gsa/s oscilloscope that can be triggered by the logic analyzer may be added to any model. Now, you can see what bus lines really look like at critical moments

The optional pattern generator capability allows you to functionally test your digital design. You can stimulate the design under test and see how it responds to specific signals or clock speeds. You can also use the pattern generator to substitute for missing subsystems. The data captured with the state or timing analyzer can then be used to verify correct operation.

Get the Whole Picture with Deep Memory

Deep memory can be a valuable logic analyzer feature for solving difficult or poorly understood problems in embedded microprocessor systems. It saves time you might otherwise spend taking multiple traces to piece together a complete picture of prototype behavior. Deep memory can also reduce the need to set up multilevel triggers because you don't have to be as precise about the data you capture. All models in the HP 1670G series can be configured to have up to 2M samples of memory depth.

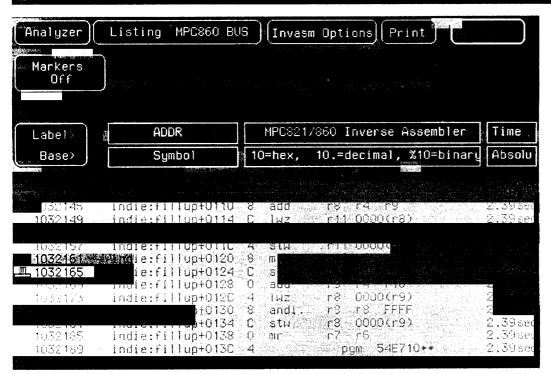


Optional 32-channel pattern generator allows stimulation of subsystems with realistic signals before the entire system is ready for testing

HP 1

Logic Analysis & Emulation Solutions

HP 1670G Series Benchtop Logic Analyzers



2 M deep acquisition memory allows analysis of long periods of target system execution.

Key Specifications and Characteristics for HP 1670G Series Benchtop Logic Analyzers

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Model	1670G	1671G	1672G	1673G			
Channels	136	102	68	34			
State Speed	135 MHz						
Timing Speed	250 MHz on all channels, 500 MHz on half channels						
Memory Depth Option 001 Option 002	64K memory standard (128K half channel timing) 256K memory (512K half channel timing) 2M memory (4M half channel timing)						
Setup/Hold Time	3.5/0 ns to 0/3.5 ns adjustable in 500-ps increments						
Probe Input R & C	100 kΩ, 8pF						
Triggering	Up to 12 sequence levels with 10 pattern terms, 2 edge & glitch terms, 2 ranges and timers. Also includes 23 predefined trigger macros with graphical representations and plain language descriptions						
I/O Standards	2-GB hard disk drive, 1.44-MB flexible disk drive Ethernet LAN for file transfers and control HP-IB, Parallel and RS-232 ports DIN mouse and keyboard ports Trigger in and Trigger out BNCs						
Oscilloscope Option 003	Number of scope channels: 2 Scope bandwidth: 500 MHz Scope sample rate: 2 Gsa/s Scope vertical resolution: 8 bits Scope memory depth: 32K samples per channel						
Pattern Generator Option 004	Number of pattern generator channels: 32 Max clock speed: 100 MHz (32 Ch), 200 MHz (16 Ch) Max memory depth: 258,048 vectors						
Training Kit Option 005	Includes a training guide, example setup and data files, and a credit-card-sized target system board						

Key Literature

Both of the following items are also available from the web site: www.hp.com/go/LAbenchtops.

HP 1670G Series Technical Specifications, p/n 5968-6421EN/EUS HP Digital Design and Debug Tools Catalog, p/n 5968-6355EN/EUS CD-ROM "Logic Analysis and Emulation Solutions" version 5.0, p/n 5965-7502E

Ordering Information

Model	1670G	1671G	1672G	1673G
Channels	136	102	68	34
Base Price	\$15,000	\$12,500	\$10,000	\$7,500
Memory Options (choo Option 001 (256K) Option 002 (2M)	ose 1 or none + \$4 000 + \$ 8000	+\$3000 +\$6000	+\$2000 +\$4000	+\$1000 +\$2000
Companion Tools (cho Option 003 (Scope) Option 004 (PatGen)	ose 1 or non- +\$7000 + \$3500	e) +\$7000 + \$3 500	+\$7000 + \$3500	+\$7000 +\$350 0
Training Kit Option 005	+\$200	+\$200	+\$200	+\$200

The HP 1664A Entry Level Logic Analyzer

The HP 1664A logic analyzer offers many of the popular features of the HP 1670G series at an entry-level price. Its features include: 50 MHz state analysis, 500 MHz timing analysis, 34 acquisition channels and 4K samples per channel memory depth. The HP 1664A uses a gray scale display and is compatible with a wide variety of processor specific inverse assemblers. The HP 1664A is priced at \$5,000. See the technical data sheet or web site for more information regarding the HP 1664A.