LA-Gold-16

PC-Based Logic Analyzer with integrated Pattern Generator

Debugging digital circuits has never been easier!

The LA-Gold-16 is a high performance logic analyzer with an integrated pattern generator. It was designed to be of superior technical quality to ensure measurements of excellent signal integrity. With class leading specifications, it offers a comprehensive digital debugging environment for the electronics professional.



LOGIC ANALYZER

✓**16 Channels**
✓**1MΩ||5pF input impedance**
✓**±60V maximum input voltage**
✓**1GHz maximum sampling rate**
✓**100MHz input bandwidth**
✓**1Meg samples/channel buffer depth**
✓ **4 independent variable thresholds,**
-5V to +5V for each group of 8 channels
✓ **Versatile triggering options**
Edge(s), Pattern, Edge AND/THEN/OR Pattern, Glitch Capture, Post Trigger delay, etc.
✓ **Digital Logger** for measuring slow varying signals
✓ **External clock input**

PATTERN GENERATOR

The integrated pattern generator can output data to the device under test and the user can measure its response with the logic analyzer simultaneously.

✓8 Channels
✓Variable signal amplitude
✓Edit patterns directly or output file
✓50Mhz output signals
✓40K buffer/channel patterns depth
✓Start on various conditions, e.g. trigger from logic analyzer inputs, manual, etc.

GENERAL FEATURES

✓**UART/RS232 monitoring/simulation**
✓**High Speed USB2 connection to PC**
✓**Comprehensive self-test capabilities.**
✓**Extension port provides useful signals for synchronization other equipment.**
✓**Hardware control DLL for programming of custom control software.**
✓**User-friendly software.** Mature software controls both the logic analyzer and pattern generator from a single, intuitive user interface. Runs on Windows 98/ME/2000/XP/Vista32...
✓**Set up and go.** Take meaningful measurements within minutes of receiving the package.
Package includes: The LA-Gold-16 instrument, 16 quality SMD test clips, User's manual hardcopy, Software and documentation on CD,

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LA-GOLD-16 TECHNICAL SPECIFICATIONS

PC-based logic analyzer with integrated

LOGIC ANALYZER	
Internal sampling rates	1GH max to 100Hz min
Digital inputs	16 Channels
Input impedance	1MΩ/5pF
Bandwidth	100MHz
Data buffer	1Meg samples/channel for 500MHz and below sampling 20K samples/channel for 1GHz sampling
Threshold voltage	-5V to +5V -60V to +60V Absolute max input
External clock	Synchronized capture: 50 MHz Max
Pre-/post trigger buffer	Variable in 100 sample steps
External clock	Synchronized capturing into linear/ring buffer. Linear capture may start on trigger condition or immediately
Digital logger	1 Second to 1-hour sampling rates

TRIGGER CONDITION	
Pattern	1, 0, and X ("don't care") conditions selectable on all channels Pattern<duration(glitch capture). Pattern>duration
Edge	Triggers on: Rising edge, falling edge, either rising or falling edge (change of state), of any one channel or combination of channels
Edge/pattern combinations	Pattern OR/AND/THEN edge Edge OR/AND/THEN pattern. (Edge rising/falling/Change of state. Pattern with/without duration)
Single/Continuous capture	Unconditionally Continuous: Display updated with regular intervals. Conditionally Continuous: Display updated when a trigger condition is detected.
Mouse/Keyboard	A trigger may be forced
Instrument integration	Can combine with pattern generator

PATTERN GENERATOR	
Nr of channels	8
Pattern source	Pattern editor or user file
Data to output clock	50MHz max
Buffer Depth	40K
Start Conditions	On logic analyzer start or arm, trigger condition, start button
Modes of operation	Single/repeat
Output Amplitude	2.5V to 4.8V
Instrument integration	Can combine with logic analyzer

DISPLAY AND SOFTWARE	
No. of channels	Any number of channels may be displayed
Channel/group names	User specified signal/group names Group values in hex/decimal/ASCII
Display order/Colors	User specified
Number converter	Converts between decimal/binary/hex
Zooming	Zoom in/out/previous/all/between cursors
Cursors	Various for time measurements, trigger point, etc.
Time measurements:	The time differences between any two cursor lines or trigger lines may be displayed. The time difference may also be indicated as a frequency.
Edge snapping	Cursors snap to signal edges for accurate time measurements..
Pattern search	Any channel conditions may be searched for 1, 0 and don't care conditions specified. Also repeated search
Saving to disk-formats	Binary data, Hex, Spreadsheet(CSV), Configuration
Printed output	Timing diagrams, bitmaps, binary/hex/decimal data. Landscape/ portrait
Software	Windows: Windows 98, ME, 2000, XP, Vista32 or later compatible versions. Data capture speed is unaffected by PC- speed Ease of use: The software is very easy to use. Most functions are directly selectable by means of function buttons on the main screen.

GENERAL SPECIFICATIONS	
Connection to PC	USB 2.0 High Speed Mode
Protocols	UART/RS232 Monitor/generate signals (More protocols to be added)
Operating Temperature	10-40°C. (50-105°F)
Extension port	Useful signal inputs/outputs E.g.: Output trigger to combine with external oscilloscope. Pattern generator strobes. UART Rx/Tx busy, fifo empty/full, etc
LA-Gold-16 unit dimensions/weight	220 g 162mm x 84mm x 26mm
Package contents	The LA-Gold-16 instrument 16 quality SMD test clips with ground leads; User's manual hardcopy Software and documentation on CD
Hardware self test	Comprehensive hardware self test capabilities

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