## HP 1660-Series Logic Analyzers



- Get to the Root of Your Problems Quickly With These Portable Logic Analyzers
- Resolve Time Intervals as Short as
   2 ns, and Find Elusive Glitches With
   5 Timing Analysis Modes
- Get an Analog View of Critical Signals With an Integrated
   2-Channel, 1 GSa/s Oscilloscope
- Display Disassembled Code Listings With Low-Profile, Low-Capacitance Interfaces For i960® Processors
- Integrate Code Flow, Timing Waveforms and Oscilloscope Waveforms Into a Single Display
- Focus on the Problem With Fast, Intuitive Operation Using the Graphic Human Interface
- Document Your Work Using Standard File Types and the Built-In 3.5" Floppy Disk

HP's 1660-series logic analyzers provide 100 MHz state and 500 MHz timing analysis in an affordable, portable logic analyzer. The i960 CA/CF CPU preprocessor interface can be used with either the HP 1660A (134 channels) or the HP 1661A (102 channels) logic analyzer. The 1660AS and 1661AS models have a built-in digitizing oscilloscope that samples at 1 GSa/sec on both channels, showing you what your timing signals really look like.

The HP E2432A Intel i960 CA/CF CPU preprocessor interface allows you to easily connect the logic analyzer to your i960 CA/CF processor-based target system. The preprocessor keeps track of the i960 CA/CF processor address pipeline and, when state traces are displayed, data is aligned with the correct address. An inverse assembler is included with the preprocessor that displays state listings in i960 microprocessor mnemonics.

100 MHz S Markens Time		Invasm Prid  g to X  O s  Trig to 0  6.10 us	X to 0 6.10 us
Label	ADDR	80960KB Inverse Assembler	M/R S
Base)	Hex	Decimal (0x = Hex)	Symbol S
254 255 256 257 258 259 260 (1) 262 263 264 265	08004980 08000A20 08000A20 08000A20 08000A20 08000A30 08000A30 08000A30 08000A30 08000A30 08000A30	C (DATA READ) 0x00000000 0 addo 16, sp. sp. 4 ship 4, 9, q0 8 call 0x08004830 C mov q0, r3 0 cmpobne 0, r3, 0x08000048 4 call 0x08004880 8 st. q0, 0x40(fp) C ld 0x40(fp), r15 0 addo 16, sp. sp. 4 lds 0x8005540, q0 6 (DISPLACEMENT) 0x08005540	READ 4
266 267 268 269	08004830 08010600 08010600 08010600	C ret 0 <data nrite=""> 0x0801C680 4 <data nrite=""> 0x08006800 5 <data nrite=""> 0x08000040</data></data></data>	READ 4 MRITE 4 MRITE 4 MRITE 4

PROCESSORS SUPPORTED: i960 Sx/Kx/Jx/Cx/Hx, MC Processors

## AVAILABILITY:

i960 KA/KB/MC preprocessors available from Corelis, Inc.

Phone: (310) 926-6727

## CONTACT:

Hewlett-Packard Company
Test and Measurement Organization

5301 Stevens Creek Blvd.

Bldg. 51L-SC

Santa Clara, CA 95052-8054

Phone: (800) 452-4844

For international contacts see Appendix B.

