HP B3740A Software Analyzer
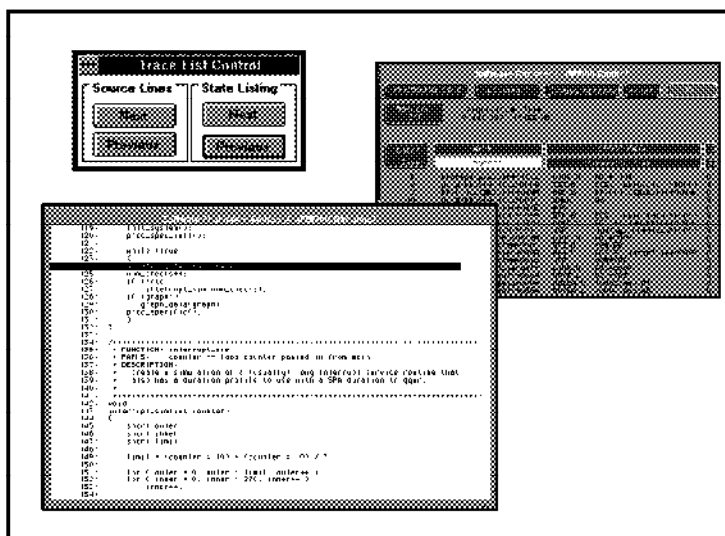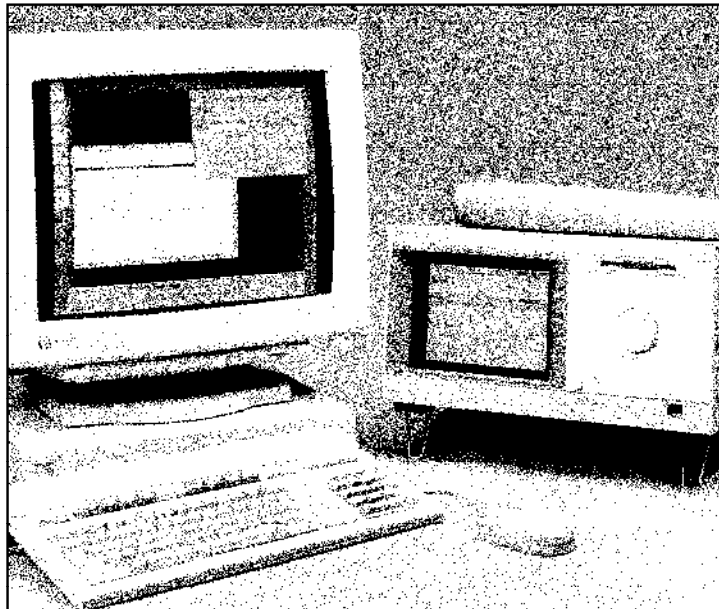
Product Overview

The Hewlett-Packard Software Analyzer combines the versatility of a general purpose logic analyzer with an interface that is tailored for software engineers. Now, you can debug your code at the source level while retaining the benefits of broad processor support and easy set-up.

Source Line Referencing in a Logic Analyzer Trace

Historically, logic analyzers have provided a bus-level view of execution. Recently, many vendors have added the ability to filter a state trace in an attempt to make it more readable. HP's Software Analyzer goes one step further by presenting a real-time trace in the high-level source language.

The interface is divided into three windows . The control window is used to input measurement requests to the analyzer such as defining a source line to trigger on. Once a trace is complete, it is displayed in the source window as high-level source code. Concurrently, the trace is displayed in the control window in microprocessor mnemonics. The two windows are interlocked so you get a time-correlated view of your code execution in both high-level source and microprocessor mnemonics. A third window, "Trace List Control," allows you to single-step through the captured trace. You can step by source line or by bus state.

The Software Analyzer combines the versatility of a logic analyzer with an interface tailored to software developers.

Extensive Symbolic Support with Your Language System

The HP Software Analyzer provides extensive symbolic support. Symbols can be used to specify trigger conditions and are listed in the trace display. Examples of supported symbols include:

- Variable names
- Function and procedure names
- Module names

If your language system generates HP/MRI IEEE-695, Intel OMF86, Intel OMF286, or Intel OMF386 the symbolic information is extracted automatically. If your language system generates a different file format, a generic ASCII format is supported. You simply create an ASCII file, which maps symbol names to addresses.

Supported on UNIX and DOS Computers

The HP Software Analyzer is supported on the following computer systems:

- PC running Microsoft Windows
- Sun Sparc® Workstations running Solaris or SUN OS.
- Hewlett-Packard Series 700 workstations running HP-UX

Broad Processor Support

The HP Software Analyzer provides support for over 120 microprocessor and microcontroller packages.

A System for the Entire Team

The HP Software Analyzer uses the modular HP 16500B Logic Analysis mainframe to acquire data. The range of measurements supported include a 1 GSa Oscilloscope card through a 4 GHz timing analyzer. By connecting this tool, both hardware and software designers can take a range of measurements to help isolate problems.

Required Configuration

The following products are required:
- HP 16500B Logic Analysis Mainframe
- HP 16550A 100MHz State/500MHz Timing Card
- HP 16500L Interface Card
- HP B3740A Software Analyzer Interface
- A preprocessor to support your microprocessor or microcontroller

Ordering Information

Model	Description
B3740A	Software Analyzer
Media/License Options	
AJ4	IBM, 3.5" Media/Documentation
AJ5	IBM, 5.25" Media/Documentation
AAY	Series 700 Media and Documentation
AAV	Sun Media/Documentation (Sun/OS+Solaris)
UDY	IBM Single User License
UBY	Series 700 Single User License
UBK	Sun Single User License