

HP 10390A System Performance Analysis Software

Technical Data

HP 10390A

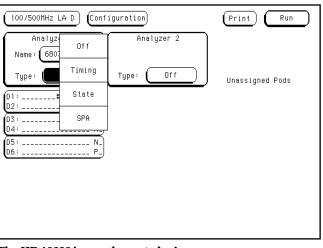
Optio	on	Model
004	HP	16550A
005	HP	1660 Series
006	HP	16554A/555A/556A

System Performance Analysis (SPA) software lets you identify and isolate performance bottlenecks. The 10390A SPA package includes State Histogram, State Overview, and Time Interval measurements to aid in the optimization process.

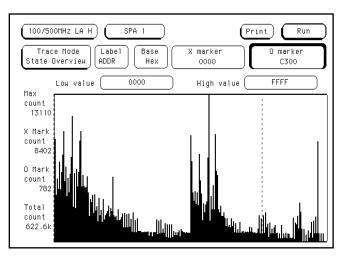
The software runs in an HP logic analyzer and provides a statistical overview of your synchronous design.

State Overview

Channels are grouped together and given a unique label name. For each label, SPA graphically displays how often possible state values are present. State overview mode can be used to evaluate memory utilization, such as illegal access in protected portions of memory, and locality of execution.



The HP 10390A complements logic analyzer analysis by adding SPA.



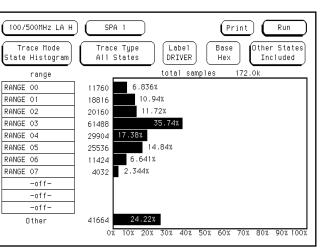
The State overview mode displays a bar chart of a label's value versus a number of occurrences of each value.

Performance Characteristics



State Histogram:

Segment a label into up to 10 range statevalue buckets and compare relative activities. For example, see which peripheral devices are tying up the CPU by defining the memory block used by each peripheral.



ranges of a label.

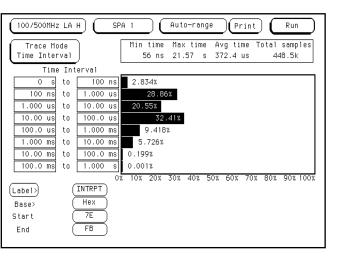
State histogram mode displays

states that occur within user-defined

State histogram mode will quickly segment the percentage of time the CPU spends under each memory block. The analyzer lists the number of states acquired in each bucket to the left of the percentage bars. The analyzer records the total number of samples in the upper right.

Time Interval

Show the execution time distribution of a single event. Define the event by specifying start and end patterns. Partition up to 8 different time buckets to measure this event. For example, use time interval mode to measure execution times



of a particular interrupt response routine.

Time interval mode displays the accumulated execution time for user-defined start and end events.

For more information on

Hewlett-Packard Test & Measurement products, applications or services please call your local Hewlett-Packard sales offices. A current listing is available via Web through Access HP at http://www.hp.com. If you do not have access to the internet, please contact one of the HP centers listed below and they will direct you to your nearest HP representative.

United States:

Hewlett-Packard Company Test and Measurement Organization 5301 Stevens Creek Blvd. Bldg. 51L-SC Santa Clara, CA 95052-8059 1 800 452 4844

Canada:

Hewlett-Packard Canada Ltd. 5150 Spectrum Way Mississauga, Ontario L4W 5G1 (905) 206 4725

Europe:

Hewlett-Packard European Marketing Centre P.O. Box 999 1180 AZ Amstelveen The Netherlands

Japan:

Yokogawa-Hewlett-Packard Ltd. Measurement Assistance Center 9-1, Takakura-Cho, Hachioji-Shi, Tokyo 192, Japan (81) 426 48 3860

Latin America:

Hewlett-Packard Latin American Region Headquarters 5200 Blue Lagoon Drive 9th Floor Miami, Florida 33126 U.S.A. (305) 267 4245/4220

Australia/New Zealand:

Hewlett-Packard Australia Ltd. 31-41 Joseph Street Blackburn, Victoria 3130 Australia 131 347 ext. 2902

Asia Pacific:

Hewlett-Packard Asia Pacific Ltd 17-21/F Shell Tower, Time Square, 1 Matheson Street, Causeway Bay, Hong Kong (852) 2599 7070

Technical information in this document is subject to change without notice.

Printed in U.S.A 5091-7850 E