
HP 94000/9490 User Training

Technical Data

Course Overview

Become familiar with HP 94000/9490 hardware modules and system software by reviewing tester architecture and performing labs covering DC, digital, and analog topics. Users will gain the necessary background to maintain and sustain existing applications, and will learn to program the tester modules to create basic mixed signal tests.

What You Will Learn

- Basic application development flow on the HP 94000/9490
- General DSP overview
- Developing DC, digital mixed signal tests
- Lab modules using an 8-bit ADC and DAC device:
 - Continuity
 - Supply current
 - DAC linearity
 - ADC snr & thd
 - Conversion time measurement
- Online and offline debugging tools
- Executing applications and data analysis tools

Specifications

Course Length

5 days

Audience

HP 94000/9490 test engineers, or anyone involved in developing test programs on the HP 94000/9490.

Prerequisites

A basic knowledge of UNIX, familiarity with C programming and a fundamental knowledge of mixed signal testing is required. Previous experience with mixed signal testers and device testing is desirable. The student should become familiar with the HP 94000/9490 manual set and attempt to use the system software before attending this class.

Delivery Method

Classroom

Format

This course liberally intersperses hands-on experience (50%) using the HP 94000/9490 mixed signal test system with lecture (50%). This approach provides maximum exposure to the equipment and reinforces concepts necessary for successful programming of hardware modules. An HP 94000/9490 mixed signal test system is shared among several students.

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Classroom Training Benefits

Experienced HP Instructors

Learn from an experienced instructor familiar with mixed signal theory, mixed signal device testing and the HP 94000/9490 products.

Regularly Scheduled Classes

Plan training months in advance.

Extensive Hands-on Practice

HP classroom training is characterized by extensive hands-on experience and interactive class discussion. HP classroom training pays off immediately because it is geared to real-world solutions.

Comprehensive Student Materials

Copies of course materials are provided for future reference on the job.

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Course Agenda

Day 1

- HP 94000/9490 Introduction
- Hardware Overview
- Software Overview
- Developing a DUT Board
- Creating a Pin configuration
- DC Testing
- Limit Table Overview
- Program Debugger and Status Monitors
- Lab: DC Testing and Debugging

Day 2

- Digital
- Hardware Overview
- Patterns and Timing
- SMS Data
- Test Speed Modes
- Digital Sequence Programming
- Digital Capture Function
- Creating Pattern Data
- Lab: Digital Testing

Day 3

- Digitize Overview
- Digitizer Sequence Instructions
- Digitizer Synchrope Instructions
- Sampler Module
- Different Functions of the Waveform Editor
- Vector Editor and Debugger
- Lab: Linearity Testing of a Digital to Analog Converter

Day 4

- Basic Digital Signal Processing
- Arbitrary Waveform Generator Overview
- Sequence Programming
- Synchrope Commands
- Special Waveform Generators
- Waveform Editor
- Sequence Debugger
- Lab: SNR/THD Testing of an Analog to Digital Converter

Day 5

- Time Measure Function
- TIA Overview
- Execution Manager
- Data Analysis
- Lab: Digital Timing Test using the TM Unit

Ordering Information

To order the HP 94000/9490 User Training (E3083AU opt 001) in the U.S. call 1-800-593-6632.

HP's Customer Registration Center can provide you with price and enrollment information about scheduled courses or a dedicated course which can be customized to meet your specific needs.

Outside the U.S., contact your nearest local HP sales office.

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