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# Programming with HP Serial Test Language on the HP 3079CT

## Technical Data

### Course Overview

This course introduces HP 3079CT users and programmers to the Serial Test Language used to test serial bit streams on printed circuit boards.

### Course Features

- Gain experience programming in the HP Serial Test Language (STL)
- Learn the Serial Test hardware and software architecture of the HP 3079CT
- Learn to emulate and test standard and proprietary (non-standard) serial bit streams up to 12.5M
- Learn how to write a serial test setup with stream, substream and process sections
- Learn how and when to use downloadable filters
- Learn how to do a multichannel bit error rate test
- Learn how to program the S-bus, U-bus, and Transistor, Transistor, Logic (TTL) personality modules to their best advantage

### Specifications

#### Course Length

5 days

#### Audience

Test Engineers, Test programmers

#### Prerequisites

Previous exposure to programming any HP 3070 system is beneficial but not required. Knowledge of Serial Bit streams that need to be tested is helpful.

#### Delivery Method

Classroom

#### Format

Course content is 40% lecture and 60% lab. This course includes extensive lab work on a variety of subjects and levels of difficulty. Students will write programs that progress from simple clock generator exercises to advanced serial testing problems.

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### Classroom Training Benefits

#### Experienced HP Instructors

Learn from an experienced HP instructor who is an expert in using and applying instrument systems to meet your measurement needs.

#### Available at HP Classrooms

Take advantage of HP's learning facilities, equipment, and interactive learning environment by attending class at an HP facility.

#### 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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# **Programming with HP Serial Test Language on the HP 3079CT (1096A+24D)**

## **Course Agenda**

### **Day 1**

- Hardware Overview
- Software Overview
- Introduction to HP STL
- Streams, Filters, and Processes
- Clock generators
- Synchronous stream formats

### **Day 2**

- TTL Personality module operation
- Transmit and Receive
- Triggering

### **Day 3**

- Single and multichannel BER
- Synchronous faw bunched stream
- Synchronous G.732 stream

### **Day 4**

- Filters
- Asynchronous streams

### **Day 5**

- S-bus & U-bus Interface Personality Modules
- S & U Interface Frames
- S & U Interface standard Tests
- Modes, types, frame structure
- Connections
- Termination
- Loopback
- Activation

## **Ordering Information**

To order the Programming with HP Serial Test Language on the HP 3079CT (1096A+24D) course in the U.S. call 1-800-HPCLASS (800-472-5277).

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

## **Region Sales Headquarters:**

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