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# Programming the HP 3079CT Board Test System with the POTS Option

## Technical Data

### Course Overview

This course introduces HP 3079CT users and programmers to testing Plain Old Telephone System (POTS) line cards using the Serial Test Language and POTS virtual instrument commands.

### Course Features

- Gain experience programming the HP 3079CT POTS to test telecom POTS line cards
- Learn the hardware and software architecture of the HP 3079CT POTS system including the POTS virtual instrument
- Learn how to generate and measure analog tones
- Learn how to perform simultaneous transmission tests on multiple channels; Gain, Quantizing Distortion, Idle Channel Noise, Gain vs Frequency, Gain vs Level, Longitudinal Balance, Transhybrid loss, Return Loss
- Learn how to control the signaling mux and digital multimeter to perform common signaling tests

- Learn how to use POTS virtual instrument toolbox functions

### Specifications

#### Course Length

5 days

#### Audience

Test Engineers, Test programmers

#### Prerequisites

Programming with HP Serial Test Language on the HP 3079CT (E1096A+24D), or equivalent is required.

Knowledge of the board(s) to be tested is beneficial but not required.

#### 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 generating single analog tones to learning how to use the POTS Virtual Instrument (PVI) digitizer toolbox functions.

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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 the HP 3079CT Board Test System with the POTS Option (E1085A+24D)

## Course Agenda

### Day 1

- Hardware Overview
- Software Overview
- Line card functions
- File structure and templates
- Transmission Testing
- D-A testing
- Controlling the PVI

### Day 2

- A-D digital analysis
- Parallel testing
- Testmain
- Quantizing distortion
- Idle Channel Noise

### Day 3

- Longitudinal Balance
- Transhybrid loss
- Return loss
- Typical signaling tests
- Signaling mux

### Day 4

- Breadboard
- Controlling the Line Conditioning Unit (LCU)
- Digital Multimeter (DMM) control

### Day 5

- PVI Digitizer toolbox functions
- DC Volts (DCV), root mean square (RMS), peak
- Ring generation
- Miscellaneous testing issues

Course Number: E1085A+24D (scheduled)

## Ordering Information

To order Programming the HP 3079CT Board Test System with the POTS Option (E1085A+24D) course in the U.S. call 1-800-HPCLASS (800-472-5277).

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

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