ATM Forum UNI 3.1 Signalling
Conformance Test Suites, Network Side

For the HP Broadband Series Test System

E7833A, E7833C

Product Features

- The complete test suite (E7833C) consists of 661 test cases. Part 1 (E7833A) consists of 189 test cases
- Fully automated stimulus-response test suite
- Flexible test case selection translates into either exhaustive testing or tailoring test case selection to suit the implementation
- Flexible data recording and playback capabilities built-in to the interface's trace window
- Clear verdict assignments for each test case run (such as PASS or FAIL)
- Comprehensive multi-level online help available

This test suite is designed to test the signalling layer at the UNI 3.1 for ATM Intermediate Systems (Network Side), such as ATM switches. It is based on the ATM Forum UNI Specification Version 3.1, derived from the ITU Recommendations Q.2931. Hewlett-Packard has developed the ATS, which has been approved by the ATM Forum.

ATM network equipment manufacturers (NEMs) and network operators can expect to achieve higher confidence with regard to their signalling implementation with this automated conformance test software.

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From this test suite development, two products have been made available:

- HP E7833A which includes Part 1 only to test Normal behavior (189 test cases in 3 groups)
- HP E7833C which includes Parts 1, 2 and 3, adding tests for Error (256 test cases in 13 groups) and Abnormal (226 test cases in 7 groups) behavior

The complete test suite contains 661 test cases.

**Key Features:**

- Fully automated stimulus-response test suite based on a recognized ATM Forum test matrix simplifies the verification process of ATM products at all phases of R&D.
- A complete, automated suite of tests in a single package can help reduce design cycle costs by producing results more quickly and with less operator intervention.
- Flexible test case selection translates into either exhaustive testing or tailoring test case selection to suit the implementation.
- Flexible data recording and playback capabilities built-in to the interface's trace window simplify the review of frames and cells transmitted.
- The operator can either pop traces to a separate window or keep track of overall results by generating variable-detail test campaign summary reports. The full exchange of messages produced by the test cases is recorded for later analysis.
- Clear verdict assignments for each test case run (such as PASS or FAIL) can help solve implementation errors whereas diagnostic information in test case traces can help pinpoint errors.
- Test repeatability is achieved by saving test session setups and results. This allows quick regression testing of product enhancements or bug fixes.
- Test campaigns are easily configured via interactive True/False or value setting questions for most PICS, PIXIT and other types of statements.
- The test suite follows an internationally recognized protocol testing standard methodology as defined in ISO 9646.
- Comprehensive multi-level online help is available to guide the user through many aspects of testing, with the help of hyperlinks, diagrams and definitions.
Applicable Standards
The following protocols are covered by the present test suite:

ATM Forum

Abstract Test Suite (ATS)
The ATS has been approved by the ATM Forum.

Areas Tested

<table>
<thead>
<tr>
<th>Test Case Group Name</th>
<th>Test Cases</th>
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<tr>
<td>General</td>
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<tr>
<td>Outgoing</td>
<td>89</td>
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<td>Incoming</td>
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<td>Non-Mand. IE</td>
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<td>AAL Failure</td>
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Configuration & Use With Other BSTS Line Interfaces, Hardware Modules & Test Software

Hardware Requirements
- HP E4200/4210 BSTS Base Platform
- 2 E4209A Cell Protocol Processors
- 2 compatible LIFs

Software Requirements
- Base Software 3.02 or higher
- E4214A UNI Signalling Test Software 3.02 or higher

Warranty & Support Options
HP Broadband Series Test System software and firmware products are supplied on transportable media such as disk, CD-ROM or integrated circuits. The warranty covers physical defects in the media, and defective media is replaced at no charge during the warranty period. When installed in an HP Broadband Series Test System, the software/firmware media has the same warranty period as the product.

This test software has no components requiring calibration.

Product Numbers
- **E7833A** ATM Forum UNI 3.1 Core Signalling Conformance Test Suite for the Network Side
- **E7833C** ATM Forum UNI 3.0 Complete Signal, CTS for Net. Side
  - #101 Upgrade credit from E7823A
- **E7834A** ATM Forum UNI 3.1 Core Signalling Conformance Test Suite for User Side
- **E7844A** ATM Forum UNI 4.0 Core Signalling Conformance Test Suite for the Network Side
- **E7845A** ATM Forum UNI 4.0 Core Signalling Conformance Test Suite for the User Side

Software Package Contents
- ETS (on CD-ROM)
- ETS User’s Guide
- ATS Manual
- Release Notice
- Test Manager GUI (on CD-ROM)
- Test Manager User’s Guide
- Test Manager Release Notice.
- Hardware key
For more information

For an introduction to the modular Broadband Series Test System, please request the BSTS Product Information & Technical Specifications, HP publication 5966-0035E or visit the BSTS web pages at

http://www.hp.com/go/bsts

The BSTS Ordering Guide, HP publication 5964-0393E, helps you determine the appropriate system configuration for your testing needs. Technical specifications detailing other dedicated test modules and test software packages for the BSTS are also available.

How to Find Out About Other HP Products, Publications & Services

For more information about Hewlett-Packard test & measurement products, applications, services, and for a current sales office listing, visit our web site, http://www.hp.com/go/tmdir. You can also contact one of the following centers and ask for a test and measurement sales representative.

United States:
Hewlett-Packard Company
Test and Measurement Call Center
P.O. Box 4026
Englewood, CO 80155-4026
1-800-452-4844

Canada:
Hewlett-Packard Canada Ltd.
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Specifications subject to change.
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