

VB5 Test Software

Agilent Technologies Broadband Series Test System

E5145A

The Agilent E5145E VB5 PDU builder facilitates quick construction of RTMC and B-BCC message.

Product Features

- Supports both VB5.1 and VB5.2
- Complete protocol encode capability, for protocol simulation, using the Protocol Data Unit (PDU) builder
- RTMC and B-BCC protocol decode and display
- Integrated with emulation up to the SSCOP layer
- Hand-shaking application for VB5 protocol testing

The Agilent Technologies E5145A VB5 Test Software is a licensed software application for testing VB5.1 and VB5.2 at the interface of Broadband Access Networks and Service Node.

Designed for the industry-standard Agilent Broadband Series Test System (BSTS), the Agilent E5145A test software provides protocol decode, simulation, and command-line hand-shaking application (UPE) for testing VB5. This product adds to the breadth of the BSTS signalling solution which includes UNI, NNI, P-NNI, ILMI and conformance test suites.

Typical Applications

Fiber-To-The-Home

VB5 is used in the emerging Passive Optical Network.

ADSL

VB5 will be used by some xDSL service providers.

Wireless access

VB5 may be used for wideband wireless access (e.g. W-CDMA) to broadband networks.

Full Service Access Networks

The FSAN committee has developed a requirements specification for future access networks. Included in this specification is VB5.

ATM switch for carrier networks

Some ATM switches implement VB5 so that they can be used as Service Nodes.

Video broadcast and multimedia

The DAVIC body's reference network architecture includes VB5.



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Key Features

Simulation using PDU Builder

Both valid and invalid protocol messages can be easily created, edited, stored and retrieved using the product's graphical PDU Builder. This allows you to stress your system under test under normal and abnormal conditions.

Decode and Display

Both VB5.1 and VB5.2 protocols can be decoded and displayed in real time or captured for detailed off-line analysis:

- real-time monitoring of message exchange between Access Networks and Service Nodes, using live data viewer
- captured message correlation for bi-directional monitoring
- concurrent reassembly of RTMC and B-BCC on two different channels

SSCOP Emulation

The Agilent E5145A includes full emulation up to the SSCOP layer. This allows you to:

- configure protocol variants
- modify timer and state machine behaviour

Protocol Hand-shaking Application

The E5145A includes a real-time VB5 protocol hand-shaking application with full emulation up to the SSCOP layer. This allows you to test simple request-response protocol exchanges.

User Programming Environment (UPE)

The product includes an Application Programming Interface (API) for the BSTS User Programming Environment (UPE). The API and UPE provide you with complete access to all product functionality and provide the tools needed to write and execute customized scripts and scenarios for automation of testing routines.

By modifying the supplied protocol hand-shaking application source code, you can develop customized functional and conformance test suites.

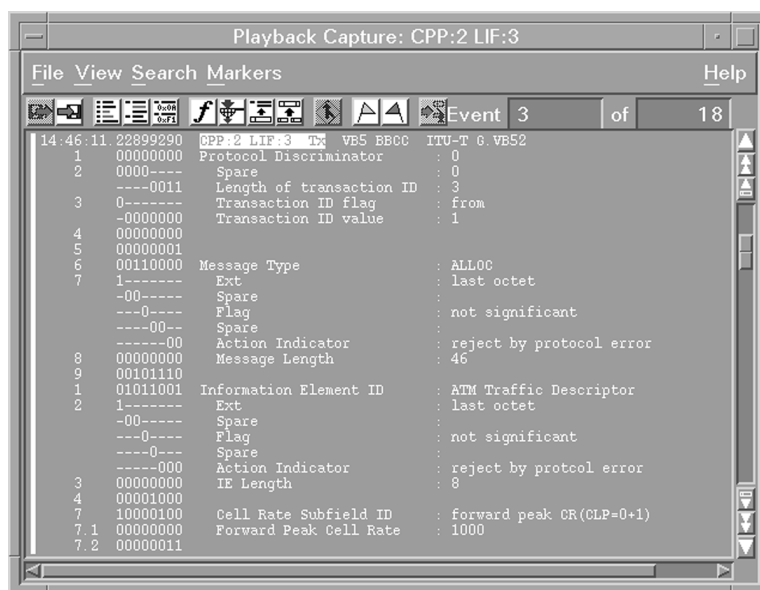
Applicable Standards

The Agilent E5145A conforms to the following:

- ITU-T COM 13-25-E, Final Draft of Recommendation G.967.1
- ITU-T COM 13-37-E, Draft New Recommendation G.967.2
- ITU-T Q.2130 SSCF and Q.2110 SSCOP

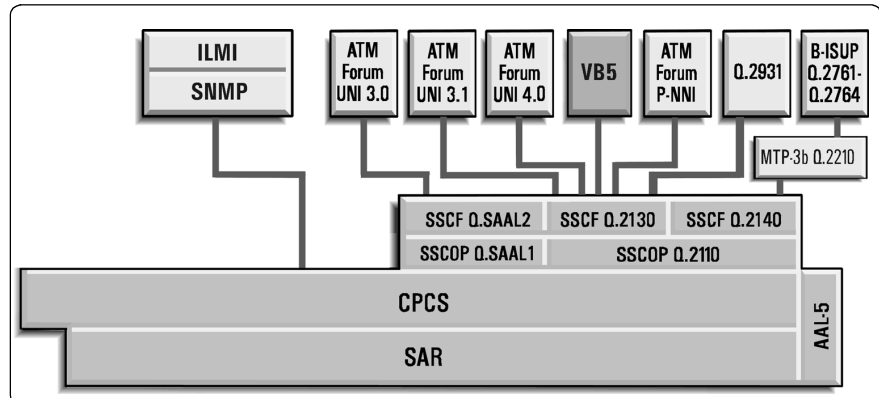
Product Numbers

- **E5145A** VB5 Test Software
- **E4200A/B** BSTS Form-7 Transportable Chassis
- **E4210A/B** BSTS Form-13 Mainframe Chassis
- **E4212A/B** ATM AAL Test Software
- **E4209A/B** Cell Protocol Processor (CPP)



Using a live data viewer, the Agilent E5145A allows for real-time monitoring of message exchange between Broadband Access Networks and Service Nodes.

VB5 Test Software E5145A



The Agilent E5145A allows you to develop customized functional test suites using real-time SSCOP emulation and VB5 encodes and decodes.

Configuration and Use With Other BSTS Modules and Applications

The Agilent E5145A VB5 Test Software requires a minimal Broadband Series Test System configuration of a chassis, Agilent E4209A/B Cell Protocol Processor, and any ATM cell-base line interface. Two cell protocol processor/line interface pairs are recommended for monitoring a bi-directional stream; two receivers are required to capture both sides of the protocol exchange between Access Networks and Service nodes. The Agilent E5145A requires the Agilent E4212A/B ATM AAL Test Software.

Since the Agilent BSTS is a flexible and modular ATM/B-ISDN test platform, you can maximize the return on your test equipment investment by selecting a chassis, line interfaces, dedicated hardware modules, and test software that suit your specific needs. Remember that you can always add extra software or modules at any time.

Warranty & Support Options

Hardware

All BSTS hardware components are warranted for a period of 3 years. Products must be returned to an authorized Agilent service center for service.

Software

Agilent 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 Agilent Broadband Series Test System, the software/firmware media has the same warranty period as the product.



Agilent Technologies Broadband Series Test System

The Agilent Technologies BSTS is the industry-standard ATM/ISDN test system for R&D engineering, product development, field trials and QA testing. The latest leading edge, innovative solutions help you lead the fast-packet revolution and reshape tomorrow's networks.

It offers a wide range of applications:

- ATM traffic management and signalling
- Packet over SONET/SDH (POS)
- switch/router interworking and performance
- third generation wireless testing
- complete, automated conformance testing

The BSTS is modular to grow with your testing needs. Because we build all BSTS products without shortcuts according to full specifications, you'll catch problems other test equipment may not detect.

www.Agilent.com/comms/BSTS

United States:

Agilent Technologies
Test and Measurement Call Center
P.O. Box 4026
Englewood, CO 80155-4026
1-800-452-4844

Canada:

Agilent Technologies Canada Inc.
5150 Spectrum Way
Mississauga, Ontario
L4W 5G1
1-877-894-4414

Europe:

Agilent Technologies
European Marketing Organisation
P.O. Box 999
1180 AZ Amstelveen
The Netherlands
(31 20) 547-9999

Japan:

Agilent Technologies Japan Ltd.
Measurement Assistance Center
9-1, Takakura-Cho, Hachioji-Shi,
Tokyo 192-8510, Japan
Tel: (81) 426-56-7832
Fax: (81) 426-56-7840

Latin America:

Agilent Technologies
Latin American Region Headquarters
5200 Blue Lagoon Drive, Suite #950
Miami, Florida 33126
U.S.A.
Tel: (305) 267-4245
Fax: (305) 267-4286

Asia Pacific:

Agilent Technologies
19/F, Cityplaza One, 1111 King's Road,
Taikoo Shing, Hong Kong, SAR
Tel: (852) 2599-7889
Fax: (852) 2506-9233

Australia/New Zealand:

Agilent Technologies Australia Pty Ltd
347 Burwood Highway
Forest Hill, Victoria 3131
Tel: 1-800-629-485 (Australia)
Fax: (61-3) 9272-0749
Tel: 0-800-738-378 (New Zealand)
Fax: (64-4) 802-6881

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