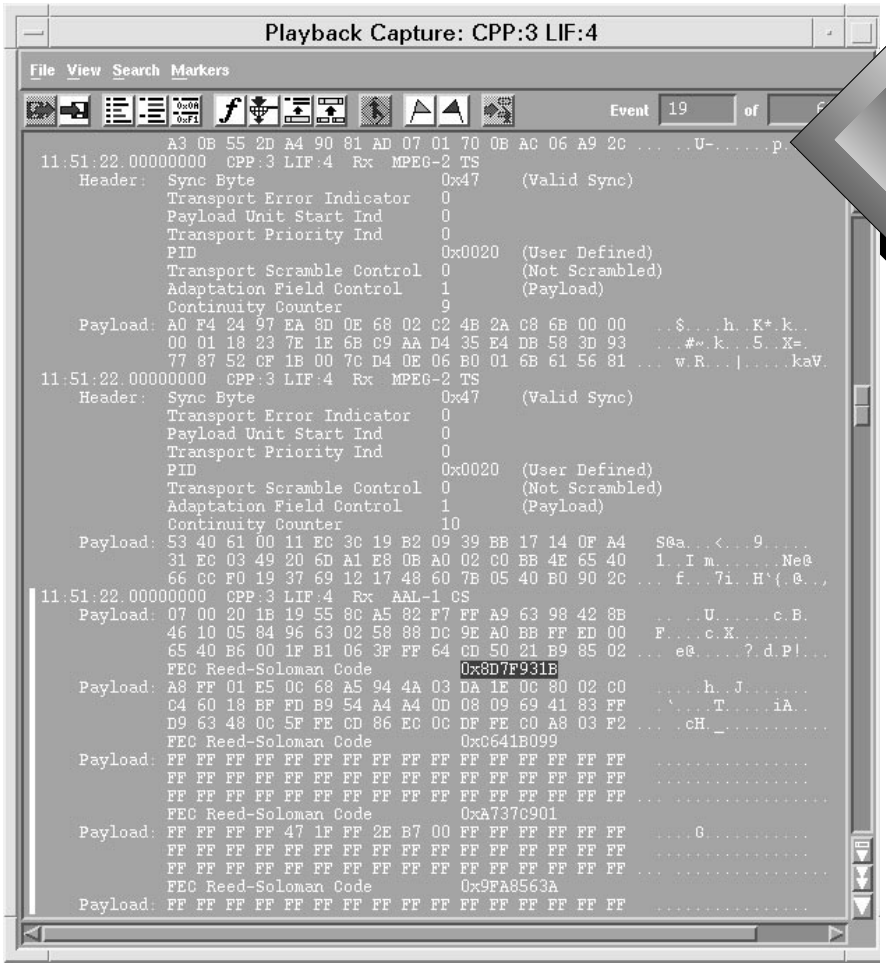
MPEG-2 Protocol Viewer Test Software

E4226B



Enhanced Support for Testing MPEG-2 Traffic over both AAL-1 and AAL-5

Major Test Functions

- Captures and decodes MPEG-2 protocol traffic carried over ATM networks using the AAL-1 (as specified in ITU I.363) and AAL-5 layers
- Comprehensive display allows error filtering and full decode of all Program Specific Information (PSI) tables, syntax checking and Reed-Solomon error indication

HP was the first to deliver advanced digital video test solutions for ATM network operators and equipment manufacturers. Now, its growing line of test products and applications includes the first software test suite to support the ITU 1.363 standard for transmission of MPEG-2 data over ATM Adaptation Layer 1 (AAL-1).

Designed for use on the HP Broadband Series Test System (BSTS), the most widely-used broadband and ATM test platform in the telecommunications industry, the E4226B supports both AAL-1 and AAL-5 testing and offers the comprehensive protocol table decode, error checking and filtering capabilities required for engineering, trialling and commissioning MPEG-2 based equipment and services.

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Decodes and Displays MPEG-2 Protocol Traffic

- Decoding of MPEG-2 over ATM AAL-1 (interleaved and non-interleaved) and AAL-5
- Provides full PSI protocol table decodes, including Program Association Table (PAT); Conditional Access Table (CAT); Program Map Table (PMT) User Tables; and Transport Stream Description Table (TSDT)
- Supports comprehensive protocol & transmission error checking including PES packet syntax checking; PSI table syntax checking and CRC confirmation Transport Stream header syntax checking
- Reed-Solomon error indication
- Displays both transport stream and packetized elementary stream headers
- Supports AAL-5 cell mapping as specified by the ATM Forum and DAVIC
- Interprets all fields, using standard terminology
- Converts timestamps, including the PCR, PTS and DTS into an easy-to-read format [Hours:Minutes:Seconds]
- Simultaneously displays ATM cells
- Checks for errors in length fields and some other fields
- Complete range of available BSTS line interfaces

Applicable Standards

- ITU I.363
- ISO/IEC 13818-1 Systems Layer

Monitors Traffic with Filtering

- Programmable filters allow display or capture of errors only or other traffic parameters
- Filters on the VP/VC connection, as well as any specified bit string pattern in the transport stream packet

Major Applications

The E4226B provides enhanced capabilities and features for decoding,viewing and troubleshooting video and associated audio carried over ATM network transport via the AAL-1 and AAL-5 adaptation layers.

The high compression ratios inherent in MPEG-2 require extremely low error rates to deliver minimal frame loss and high picture quality.

Through use of the E4226B Protocol Viewer software, ATM network operators, equipment manufacturers, and cable companies view and monitor network traffic, and validate and troubleshoot a wide variety of digital video equipment, including video servers, real-time MPEG-2 encoders, video head-ends and set-top decoder boxes.

Broadband Series Test System Configuration

The Broadband Series Test System (BSTS) is a sophisticated UNIX-based high-speed ATM/B-ISDN test platform. Used for product development, quality assurance, network operation, type approval and conformance testing, the BSTS can perform comprehensive testing of all ATM protocol layers. Multiple protocols can be simultaneously tested on multiple ports by configuring a test system with line interfaces, processors, load generators and test software to suit your specific needs.

Ordering Information & Accessories

E4226B MPEG-2 Protocol Viewer Test Software

E4209B Cell Protocol Processor

E4212A AAL Test Software

For more information on Hewlett-Packard Test & Measurement products, publications or services, please call your local Hewlett-Packard sales office. A current listing is available via Web through AccessHP at http://www.hp.com. If you do not have access to the internet, please contact one of the HP centers listed here and they will direct you to your nearest HP representative.

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