Interra H264 Analyzer

Addressing the needs of media professionals to debug and optimize digital-video products, Interra's H264 Analyzer provides detailed analysis of video and audio streams.

Reducing development time and costs, and increasing productivity, the analyzer enables media professionals to quickly bring to market high quality and standard-compliant digital video products.

The analyzer is an ideal tool for media professionals who need to:

- Verify a stream's compliance with the defined standard
- Debug an encoded stream, or optimize a stream's buffer requirements
- Evaluate and compare the performance and quality of video compression/decompression tools
- Optimize and refine video compression CODEC
- Check interoperability issues

Standards Supported

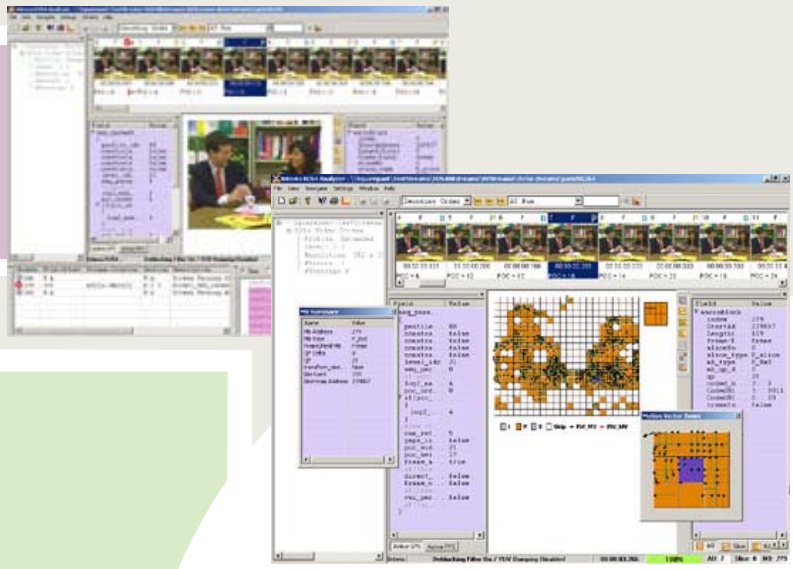
Video: H.264, MPEG-4, and MPEG-2

Audio: AAC, Dolby AC-3, and AMR

System streams: MPEG-2 Transport, MP4, 3GPP, and AVC

Runs on Windows 2000, XP.

Comprehensive Video/Audio Analysis to Reduce Debug Cycle



Video: Picture Display with Detailed Analysis of Macroblock Information

Key Product Benefits

- Extensible architecture to support other audio, video, and system formats
- Powerful debug capabilities to analyze picture-by-picture
- Quick forward/backward navigation; also, vertical navigation down to MB level
- Detailed display of coded information along with quick-to-capture summary information: average bits, quantizer, and frame statistics
- Cross-reference feature that links error messages to error points in the stream
- Detailed trace output to find out syntax-by-syntax data values
- Messages in XML format for ease of distribution
- Extraction of video and audio from system streams for future debugging purposes
- Facility to store analyzed data for future reference
- Batch mode for regression testing
- Interactive buffer analysis capabilities
- Powerful YUV Diff utility to evaluate video quality

Potential Users

Media Product Developers and Designers working with technologies, such as:

- Video CODEC
- Semiconductor devices
- Mobile Multimedia
- Video Conferencing
- Broadcast and Network Monitoring

Media Content Providers and Enablers, such as:

- Network Operators
- Cable TV, TV, Video, and Movie companies

Standard-specific Features

H.264

- Supports Baseline, Extended, and Main profiles and all levels within these profiles. Also, supports High, High 10, High 4:2:2, and High 4:4:4 profiles
- Supports all tools, such as CABAC, CAVLC, MBAFF, and PAFF
- Displays Macroblock, Slice, NAL unit, and binary data for each picture
- Displays frame statistics to analyze interpolation, prediction mode, coded bits, and frame size
- Generates encoder performance and quality metrics graphs
- Performs buffer analysis: CPB

MPEG-4 Video

- Supports Simple (levels 0-3) and Advanced Simple Profiles, Basic and Advanced tools
- Performs buffer analysis: VBV, VMV, VCV
- Displays the VOL, VOP, Short Video Header, and binary data for each picture
- Generates encoder performance and quality metrics graphs, such as Quantizer distribution, Picture Size distribution.

MPEG-2 Video

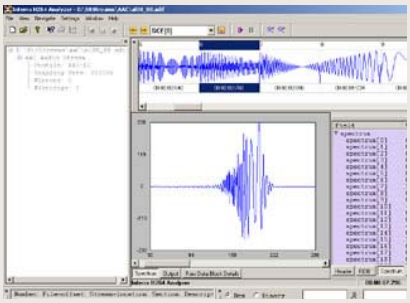
- Supports Simple and Main Profiles and all levels
- Performs buffer analysis: VBV
- Displays Sequence, Picture, and Macroblock Header, and binary data for each picture
- Generates encoder performance and quality metrics, such as Quantizer distribution, Picture Size distribution

AAC/Dolby AC-3/AMR Audio

- Supports AAC-Main and AAC-LC profiles. Also supports AAC+Ver1 and AAC+Ver2 profiles
- Supports all channel elements including SCE, CPE, LFE, and CCE
- Displays ADIF headers, PCE, Raw Data Block details
- For all RDBs, displays ICS info, spectral data, pulse data, scale factors, sections, and output data
- For Dolby AC-3 supports tools, such as Synchronization & Error Detection, Decoupling, and Dynamic Range Compressions
- For AMR, displays the Header, Auxiliary, and Core Frame structures

MP4/3GPP/AVC File Formats

- Displays the file hierarchy and tracks in a tree view
- Displays atom/descriptor list cross-linked with the hex/binary view
- Provides the facility to analyze the selected individual track from the tree view



Audio: Spectrum Frequency Display

MPEG-2 Transport

- Supports detailed analysis of audio/video stream carried over MPEG-2 Transport streams
- Displays MPEG-2 Transport Stream hierarchy in a tree view
- Displays Transport Packet Header, PES Packet Header, and PSI fields

Input Formats & Standards Supported

Video

- H.264 (ISO/IEC 14496-10)
  - Fidelity Range Extensions Amendment to ITU-TRec. H.264 I ISO/IEC 14496-10
- MPEG-4 (Part 2 (ISO/IEC 14496-2)
- MPEG-2 (ISO/IEC 13818-2:1995 and Amendment - 1999-03-01)

Audio

- AAC (ISO/IEC 14496-3 sub part 1 and 4, Amendment 1)
- Dolby AC-3 (A/52, A/52A)
- AMR (3GPP TS 26.101 V5.0.0)

System Layer

- MP4/AVC (ISO 14496-1 and ISO 14496-12)
- 3GPP (TS 26.244 V6.0.0)
- MPEG-2 Transport (ISO/IEC 13818-1 and ISO/IEC 13818-1:2000/Final Draft Amendment 3)

Availability

Available as an executable and also as an SDK, without the GUI, which can easily be integrated in your application

Recommended System Configuration

- 2 GHz or faster Pentium IV computer
- Windows 2000 or XP
- 512 MB or more of RAM
- 20 GB or more hard disk capacity
- 15" or larger SVGA display (1024x768)

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