

EVO™ T4004/T8008 – Mobile Broadcast Encoder/Transcoder Family

igolgi's EVO™ is a family of multi-channel H.264 transcoders which are targeted for turnaround transcoding for ATSC M/H feeds. The transcoders can accept as input ATSC MPEG2 SPTS or MPTS streams and reencode the content into the ATSC M/H video and audio formats at very high quality over a variety of resolutions and bit rates.

Turnaround Mode:

Assume bandwidth available in multiplex to handle ATSC M/H compressed signal

Squeeze Mode:

Transrate incoming content to make room for additional ATSC M/H channels

EVO™ T4004 supports up to 4 channels of inputs (1 HD and 3 SD or lower resolutions) on the input and up to 4 ATSC M/H encoded H.264 streams on the output.

EVO™ T8008 supports up to 8 channels of inputs (maximum 1 HD and up to 7 SD or lower resolutions) on the input and up to 8 SD encoded H.264 streams on the output.

The output format can be flexibly streamed out in MPEG2-TS, IP or ASI formats.

EVO™ T4004/T8008 currently available for the Intel® Xeon® 55xx or 56xx series processor. The flexible nature of the T4004/T8008 software solution enables scaling to match the requirements of any distribution architecture and form factors.

Key Features:

- Innovative and very high quality algorithms for H.264 video compression that are optimized to run efficiently on multi-core CPUs
- High Density solution that can be further tailored to meet your requirements of cost and performance
- RTP/UDP/IP and MPEG2-TS transport outputs supported
- CBR, VBR and capped VBR rate output rates supported
- True Multi-pass for maximum compression efficiency and high video quality
- Flexible , in-depth, web based management and control interfaces
- Customizable software platform for easy integration of many optional functions
- 1U Form Factor



Intel Xeon 1U Server

SPECIFICATIONS

Compression Standards

Input Video:
MPEG2
Output Video
MPEG-4 AVC/H.264
Baseline profile for ATSC M/H
Main, and High Profile (options)
Level 3 SD

Input Audio:
Dolby AC3
Output Audio:
MPEG-4 HE AACv2

Optional Video Processing Options

Cropping/Scaling
Resize for specific screen types
Logo Insertion

Other Encoding Features

Fixed and Dynamic GOP Structures
Single and multipass modes
Low Latency mode (option)

Operational Modes

Turnaround Mode

Encode/Transcode up to 8 input channels for ATSC M/H transmission. Compressed MPEG2 inputs in this mode are not altered

Squeeze Mode

Encode/Transcode up to 8 input channels for ATSC M/H transmission. Compressed MPEG2 inputs transrated to make room for ATSC M/H channels

Rate Control

CBR
VBR
Capped VBR

Input Interfaces

IP
SD/HD-SDI(option)
ASI (option)

Output Interfaces

IP
ASI (option)

Output Bitstream Formats

MPEG2-TS
IP/UDP/RTP
IP/UDP/RTP/MPEG-TS
COP v3 FEC encoding (option)

Configuration and Management

Embedded web-server interface
SNMP MIB (customizable option)

Xeon Platforms

Xeon 55XX
Xeon 56XX
1U form factor

High efficiency power (option)
Redundant power (option)
Local time delay function (option)