

VIVACE™ E201 HD MPEG2/H.264 Contribution/Distribution Encoder Advanced Codec Technology for the Intel® Xeon® 55xx/56xx Servers

igolgi's VIVACE™ E201 Encoder is a scalable, multi-core software MPEG2 and H.264 encoder solution currently available for the Intel® Xeon® 55xx or 56xx series processor. The flexible nature of the E201 software solution enables scaling to match the requirements of any distribution architecture. A variety of video processing features are available such as format conversion before encoding, MCTF noise filtering, and PIP channel creation.

A unique feature of the E201 is the support of 3D HD encoding from the two full HD inputs. A variety of 3D formats such as side by side, interlaced, or full 1080p 120 HZ (left/right interleaved) are available.

The VIVACE™ E201 includes 2 Channels of full-HD 1080p60 capture within a 2U chassis. MPEG2 or H.264 encoding is done completely in software on the Intel® Xeon® 55xx or 56xx series processor. The output format can be flexibly streamed out in MPEG2-TS, IP or ASI formats. Additionally, the software has been architected to exploit availability of additional cores in future processor generations and additional capture card density increases to further creating even denser solutions.

By leveraging off the shelf platforms, with innovative software architectures, igolgi Inc. provides a high quality video solution that can be tailored for any given application.

Key Features:

- Innovative algorithms for MPEG2 and 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
- Optimized for multi-core platforms for ultimate efficiency and scalability
- RTP/UDP/IP and MPEG2-TS transport outputs supported
- CBR, VBR and capped VBR rate control methods
- True Multi-pass for maximum compression efficiency
- Flexible API and in-depth control interfaces
- Flexible software platform for easy integration of other functions
- Variety of video processing options such as 3D encoding, PIP channel, and format conversion
- 2U Form Factor with Two HD-SDI or Two 3G-SDI inputs



SPECIFICATIONS

Compression Standards

Video

MPEG-2

Simple, Main, and 422P Profile
up to High Level

MPEG-4 AVC/H.264

Baseline, Main, and High Profile
Level 3 SD, Level 4.1 HD

Audio

MPEG-1 layer 2

MPEG2/MPEG-4 AAC-LC

Sampling Freq 32, 44.1, 48 KHz
Up to 8 stereo pairs

Video Processing Options

Format Conversion

50i \leftrightarrow 60i

MC - 3 field deinterlacer

Cropping/Scaling

AFD and WSS

PIP channel

MCTF Noise Filtering

Delay Insertion (0-12 hours)

CC (EIA-708)

3D Format Creation/Encoding

Other Encoding Features

Fixed and Dynamic GOP Structures

Single and multipass modes

Encoding to MP4 file (option)

Low Latency mode (option)

Scene Cut Detection and Insertion

Rate Control

CBR

VBR

Capped VBR

Input Interfaces

2 HD-SDI

2 3G-SDI (option)

Dual Link HD-SDI (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 (option,customizable)

Xeon Platforms

Xeon 55XX/56XX

2U Form Factor

High efficiency power (option)

Redundant power (option)

HDD and RAID storage options

(for MP4 file format or Delay options)