

**VIVACE™ E101 SD MPEG2/H.264 Distribution Encoder**  
**Advanced Codec Technology for Intel® Xeon® 55XX/56XX Servers**

igolgi's VIVACE™ E101 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 E101 software solution enables scaling to match the requirements of any distribution architecture and form factors. A variety of video processing features are available such as format conversion before encoding, MCTF noise filtering, and PIP channel creation.

The VIVACE™ E101 encodes 8 Channels of full-SD 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 enable 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
- RTP/UDP/IP and MPEG2-TS transport outputs supported
- CBR, VBR and capped VBR rate control methods
- 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
- 2U Form Factor with 8 SD Inputs



Intel Xeon 2U Server

## SPECIFICATIONS

### Compression Standards

#### Video

##### MPEG-2

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

##### MPEG-4 AVC/H.264

Baseline, Main, and High Profile  
Level 3 SD

#### Audio

##### MPEG-1 layer 2

##### MPEG2/MPEG-4 AAC-LC

Sampling Freq 32, 44.1, 48 KHz

Up to 8 stereo pairs (SDI input)

### Optional Video Processing Options

#### Format Conversion

PAL to/from NTSC

50i/25p to/from 60i/30p

MC - 3 field deinterlacer

#### Cropping/Scaling

AFD and WSS (option)

MCTF Noise Filtering (option)

CC (EIA 608, SMPTE 334)

PIP channel output (option)

### Other Encoding Features

Fixed and Dynamic GOP Structures

Single and multipass modes

Low Latency mode (option)

Scene Cut Detection and Insertion

### Rate Control

CBR

VBR

Capped VBR

### Input Interfaces

Composite

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

Xeon 56XX

2U form factor to support I/O

High efficiency power (option)

Redundant power (option)