

VIVACE – 4K HEVC Live Encoder Platform

igolgi's VIVACE encoding platform series is a very versatile, compact, high quality and reliable encoding platform with a variety of configurations for standards based HEVC encoding.

Using four 3G-SDI inputs, a baseband signal with embedded audio can be encoded into streams at very high quality over a variety of supported resolutions and bit rates up to and including 4K resolution.

The output over IP can have a variety of formats. Optional output ASI support is also available.

In addition, the VIVACE platform can optionally support the CALM act and also offers Emergency Alert System (EAS) integration through a CVBS input interface or IP input interface. Static PSIP and input interface (over IP) to support an external dynamic PSIP generator is also available as standard features.

A convenient Web interface with a very rich and easy to navigate graphical user interface together with diagnostic and maintenance tools makes the VIVACE platform easy to set up and manage.

The product series supports HEVC-Main and Main10* video and MPEG-H*, AC3, AAC-HE v2 audio, over a wide variety of profiles. The product is available in a variety of configurations for UHD applications. With an optional software upgrade, the product will also be capable of supporting HDR10 encoding.*

Key Features:

- Innovative and very high quality algorithms for HEVC video compression that are optimized to run efficiently on multi-core CPUs
- RTP/UDP/IP and MPEG2-TS transport outputs supported
- CBR, VBR and capped VBR rate output rates supported
- Multi-pass for maximum compression efficiency and high video quality
- Statistical Multiplexing supported (for multichannel configurations)*
- CALM Act Support (SW option)
- EAS support (optional - through CVBS interface)
- Logo Insertion
- Text scrolling feature (based on input into Web interface)
- Flexible , in-depth, Web based management and control interfaces
- Customizable software platform for easy integration of many optional functions
- NTP clock synchronization
- External clock sync. available for 3G-SDI input
- Automatic redundancy management
- SNMP for monitoring and control
- Optional ASI output also available
- Different Form Factors for various configurations



SPECIFICATIONS

Compression Standards

Video

Up to 3840x2160 resolution HEVC – Main Profile, Main10*
HDR10* Support

Audio

Multiple programs per channel
MPEG-1 layer 2
MPEG-2 layer 3 (mp3)
MPEG2/MPEG-4, AAC-LC, AAC-HE
AC-3 and MPEG-H* Encoding
Sampling Freq 32, 44.1, 48 KHz

Resolutions and Frame rates

Flexible – Up to 3840x2160, 60 fps
Mix and match resolutions

Audio/Video/Transport Processing

Cropping/Scaling
Single in – multi-out (option)(e.g. PIP)
Noise Filtering (option)
COPv3 FEC Encode(option)
Audio Level Control (option)

Other Encoding Features

Fixed and Dynamic GOP Structures
Single and multi-pass modes

Rate Control

CBR
VBR with stat mux support
Capped VBR

Input Interfaces

Four 3G-SDI inputs
ASI or IP interface for compressed inputs (option)

Output Interfaces

IP
ASI (option) with SPTS or MPTS(option) output

Output Bitstream Formats

MPEG2-TS
IP/UDP/RTP
IP/UDP/RTP/MPEG-TS
MMTP/ROUTE Transport Layer support*
COP v3 FEC encoding (option)

Additional Features

Logo insertion
CALM Act Support (option)
EAS Support (option)
Scheduled Text Scrolling Support (option)

Configuration and Management

Embedded web-server interface
SNMP MIB (customizable option)
Remote service and upgrade

Xeon Platform

Intel Xeon E5 26xx v4 series of processors

Power Supply:

AC-DC power supply w/ PFC
AC : 100-240V, 50-60 Hz
750W rated power supply
Redundant Power supply

*Feature to be supported by August 2017