Magicboy

DIBVISION | DIBSYS

8/16/32 Full HD HEVC/H.264 HDMI IPTV Encoder

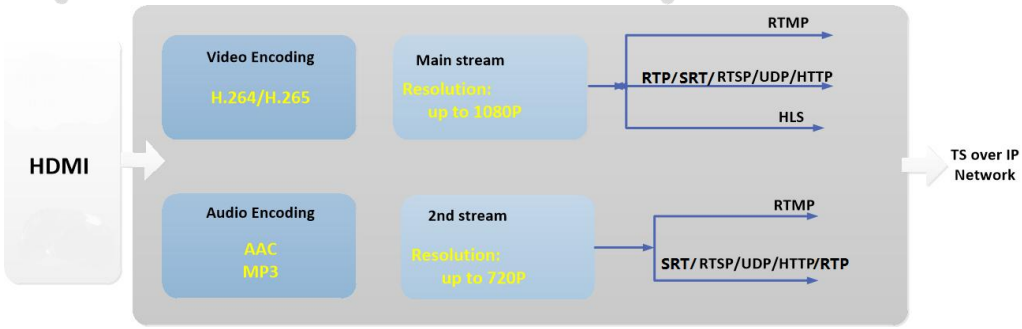
MagicBoy can support 8/16/32 channels input, it is the world's New Generation HEVC H.265/H.264 hardware encoder in a professional grade, compact streaming appliance. The product has the function of supporting 8/16/32 channels HD-MI video capture, generate dual stream of H.264/H.265 encoding output and the MP3, AAC, LC AAC, HE AAC audio format. The product has high integration and reasonable price which can generate an H.265-encoded stream compliant with RTSP, HTTP, UDP, SRT, RTP, RTMP, RTMPS. HLS, NDI (option) protocols, to various servers, such as Adobe Flash Server, FACEBOOK, Wowza Server, Windows Media Server.

MagicBoy boasts an all-hardware compression chip for real time encoding with advanced audio and meta data handling - all packaged in a portable device with low power consumption, which makes it possible to take next generation HEVC encoding from the server rooms into the field for professional and industrial applications with easy integration to education, health care, IPTV, conference, remote education, news interview, banking, transportation and other industries.

Features

- 8/16/32*HD-MI (HDCP) Inputs
- Two Protocol, Bitrate, Resolution, Profile per HD-MI Source Input
- support insert picture LOGO, only BMP format. Please name it: logo.bmp
- English/Chinese OSD insert, and OSD rolling
- Support to add the company logo and symbols, which can be displayed anywhere on the screen
- Will come into effect as soon as it is set up, no need to restart.
- Dual streams out, Each HD-MI input source simultaneously support one channel up to 1920x1080p Full HD and one channel 1280x720 HD output
- Video packaging mode: mode A: FFMPEG; Mode B: VLC
- PMT ID and Transport ID meet the DVB standards
- Each channel stream can simultaneously support any one among the UDP/RTSP/RTP/HTTP/SRT/HLS protocol, including RTMP/RTMPS protocol output, NDI optional
- RTSP stream support identity authentication
- support push stream to RTSP server
- Plug in Internet line, work without HD collection card
- Support simultaneous display of one computer and multiple devices
- Supports both HEVC and H.264 – built for the future without losing support for legacy receivers/decoders
- Support DHCP automatically get IP, One-keyrecovery, version upgrade and remote maintenance
- Web page video preview function, facilitate the implementation of adjustment
- HD-to-SD downscale conversion
- Support CBR and VBR mode
- Low power design
- WEB Management

Principle Chart



Main Application

- Low Bitrate Video and audio compression transmit
- IPTV, conference, remote education
- Backhaul/Monitoring for Broadcasters

TECHNICAL SPECIFICATIONS

Video Inputs

8/16/32*HD-MI (HDCP),

Audio Inputs

Processes first two channels of audio embedded in HD-MI input signal

OUTPUTS

IP Output type	RJ45 providing 10/1000Base-T Ethernet with Static or DHCP addressing;
Protocol	RTMP, RTMPS, RTSP, HTTP, SRT, UDP, HLS, NDI(option) Multi-cast (number of clients may vary from 3 to 10)
Multi-Screen	Up to 2 channels High def. and any resolution of streams simultaneously out per
Frame rate	@30fps

Users Interface

Computer Based control	HTTP via standard PC or web browser using Command Center. The simple Control API and SDK is also available to programmers to create their own application

Pre-processing

Image setting	Video adjustments (Brightness, contrast, Saturation, Hue)
Frame rate	from 5fps to 30fps
Image insertion	OSD insertion
Enhancement filter	Deinterlacing; Noise reduction; Sharpening; Visual Optimizing; Filtering

H.265/HEVC Video Encoding

Bitrate mode	VBR, CBR
Key interval	5-200
first stream	1920*1080,1280*a720,1024*576, 850*480, 720*576, 704*576, 640*480, 640*360, auto
Second Stream	1280*720, 800*450, 720*576, 720*408, 704*576, 640*480, 640*360, 352*288, 320*240, 320*180, auto
H.265 encoding	MPEG-H HEVC (ISO/IEC 23008-2) Main Profile Level 4.1 (4:2:0 8-bits)
Video Bitrate	100kbps to 12Mbps
Encode Frame Rates	Encode frame rates representing 1:1, ½ and ¼of the input frames rates are Supported

Bitrate of Res.

720x576 (D1)	200-500kbps
1080x720p (HD)	800-2000kbps
1920x1080p (Full HD)	1000-2500kbps

H.264/MPEG-4 Part 10 (AVC) Video Encoding

Bitrate mode	VBR, CBR
HD-MI	
First stream	1920*1080, 1280*720, 1024*576, 850*480, 720*576, 704*576, 640*480, 640*360, auto
Second Stream	1280*720, 800*450, 720*576, 720*408, 704*576,640*480, 640*360, 352*288, 320*240, 320*180, auto

Audio Encoding

Audio encoding	AAC, MP3, LC AAC, HE AAC, G711(Only RTSP)
Bit Rates	Range from 48 kbps to 256 kbps
Resample Rate	32Khz, 44.1Khz
Audio Channel	L+R, L, R

Control

1000M Base T Ethernet, RJ45,auto-negotiation
Management via Web
Language English/Chinese

Environment

Power Supply	+12V (Compact size), 220V (1RU)
Power consumption	28W
Operation temperature	0 -50°C (32 -122°F)
Storage temperature	-40-70°C (-40-158°F)

