

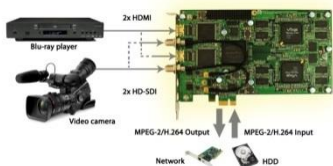
Products: nabiTV™ Encoder (HDMIx2)

“2 Channels HDMI/SDI or MPEG-2 entered, H.264/AAC Encoding them to .mp4 formatting with file store”



Functions

- A/V Input : x2 HD or x4 SD channels Capture & IP input
- A/V Encoding : x2 HD or x4 SD channels multibit rate encoding
- A/V Output: x2 HD or x4 SD channels multibit rate Packets or File
 - . H.264 TS IP Unicasting and Multicasting
 - .mp4 file format on the Storage.



encoding board

Features

- A/V Input : x2 HDMI, x2 SDI, x4 RCA & RF, x2 or x4 MPEG-2 TS
- CODEC : H.264 and AAC(LC-AAC, HE-AAC), AC3
- Output to Packetized & File format :
 - . ISMA profile 0, 1, 2, 3, 4 & Closed caption v1, 2, Encryption v1, 2
 - . H.264 TS
 - . Standard .mp4, ISMA .mp4, Instant-on .mp4
- Patent: **SIMD Acceleration/Instant-on/Skip-protection/RTP-redirection**



Design

- Middle tower Type
- GUI configuration
- 2 Gigabit Ethernet ports



Products: nabiTV™ Encoder (HDMIx8)

“8 Channels HDMI with 1x ASI entered mux to H.264/AAC encoding them to .mp4 formatting with file store”



Functions

- A/V Input : x4 or x8 HD channels Capture & IP input
- A/V Encoding : x4 or x8 HD channels multibit rate encoding
- A/V Output: x4 or x8 HD channels multibit rate Packets or File
 - . H.264 TS IP Unicasting and Multicasting
 - .mp4 file format on the Storage.
 - . x4 or x8 HD MPTS or SPTS on x2 ASI (Optional)
 - . X4 or x8 HD MPTS or SPTS on x1 IP UDP (Optional)

Features

- A/V Input : x4 or x8 HDMI, x1 ASI, x4 or x8 MPEG-2 TS
- CODEC : H.264 and AAC(LC-AAC, HE-AAC), AC3
- Out put to Packetized & File format :
 - . ISMA profile 0, 1, 2, 3, 4 & Closed caption v1, 2, Encryption v1, 2
 - . H.264 TS
 - . Standard .mp4, ISMA .mp4, Instant-on .mp4
 - . PSI/SI editing and inserting, IP null packet filter, PID filter & transparent transport(Optional)
- Patent: SIMD Acceleration/Instant-on/Skip-protection/RTP-redirection

Design

- 2U rack-mount device for 19” telecoms rack
- 8 Channels x2 ASI output or IP over UDP Unicast or Multicast
- 1 + 2 Gigabit Ethernet ports & 1 RJ45 type console port
- Front panel LCD & Button for configuration with system information
- Remote administration Web & Java interfaces
- BISS support, ssh console, Linux 2.6.x OS

Products: nabiTV™ Encoder (HDMIx2, HDMIx8)

► Specification

Inputs

Video -HD x2, x4, x8 HDMI
-HD x1 ASI(Only HDMIx8 model)

Audio -X2, x4, x8 HDMI
-x1 ASI(Only HDMI x8 model)

Media -NONE

CODEC -MPEG-2 up to 1920x1080@60i
(Video) -H.264 up to 1920x1080@60i

CODEC -MPEG-1 Layer I, II, MP3
(Audio) -Dolby Digital AC3 5.1
-Dolby Digital Stereo
-DTS HD multi-channel
-HE-AAC, LC-AAC

Format -MPEG-2 TS
-H.264 TS

Subtitles, Tag, Filters

Subtitle -Closed captions(SMPTE-334M)
-Vobsub, Kate, Text files,
-Universal Subtitle Format(USF)
-VCD/SVCD/DVD, OGM, CMML

Tag -ID3 tag, APEv2, Vorbis comment

Filter (Video) -De-interlacing
-Cropping
-Noise reduction
-Sharpening

Filter (Audio)
ETC., -Update devices through NMS port
-LCD panel keyboard operating
-Network management(SNMP)
-IPv6
-CPU acceleration
-SIMD acceleration
-ISMA profile 0,1,2,3,4
-Instant-on
-Skip-protection
-RTP-redirectation

Hardware

Host Embedded system

Capture Embedded system

Outputs

CODEC -MPEG-4 Part10/H.264/AVC
-MPEG-2
-MPEG-4 Part3/AAC, LC-AAC, HE-AAC
-MPEG- Layer II/III, AC3

Multiplexing -x1 ASI with 8 Channels TS to
x2 ASI out(Only HDMI x8 model)
x8 SPTS over UDP (Uni/Multicast) out
-mp4 file format store

Level 3.0, 3.1, 3.2, 4.0, 4.1, 4.2

Resolution 320x240, 352x240, 720x480, 720x576,
1280x720, 1440x1080, 1920x1080

Frame rate 50i, 59.95i, 60i, 50P, 60P

Bit rate -Video : 128Kbps ~ 19Mbps
-Audio : 16Kbps ~ 384Kbps

Sampling rate -32KHz, 44.1KHz, 48KHz 24bit

Entropy coding -Main/High profile : CABAC
-Base line profile : CAVLC

Encoding Method -File format to .mp4
-Unicasting & Multicasting
-CBR/VBR 1 pass Encoding
ETC., -Key frame insertion
-Auto scene change detection
-Resize function

Storage

HDD -SSD DAS
-HDD NAS
-HDD SAN