



NDS3542LU

Multi-Channel Encoder



Product Overview

NDS3542LU Multi-Channel encoder is a professional HD audio & video encoding and multiplexing device. It has 8/12/16/20/24 HDMI video input interfaces, and supports HEVC/H.265, MPEG-4 AVC/H.264 video encoding, with H.265's high compression ratio, it helps to save bandwidth up to 75%. In conclusion, its high integrated and cost effective design makes the device widely used in varieties of digital distribution systems such as cable TV digital head-end, digital TV broadcasting etc.

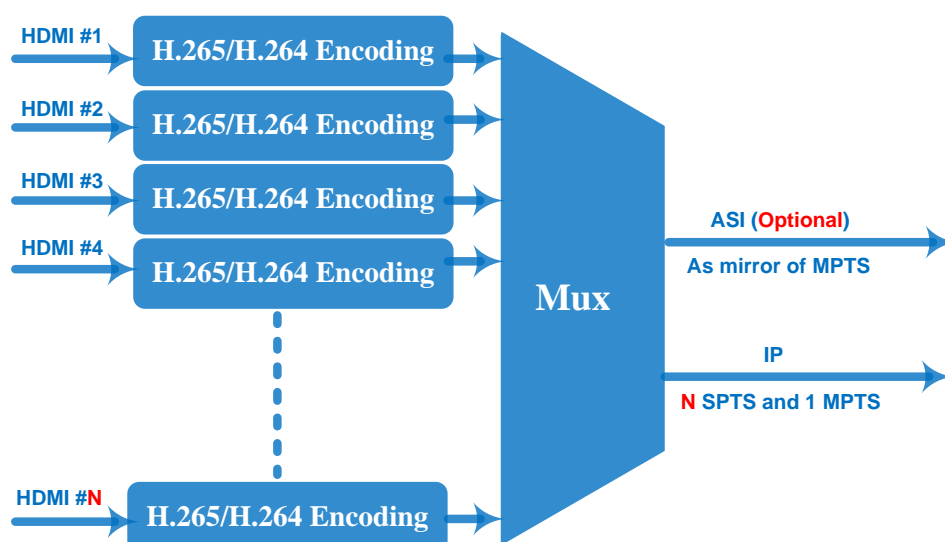
Key features

- **8/12/16 /20/24× HDMI input with 8/12/16 /20/24 SPTS and 1 MPTS output through Data 1 and Data 2**
- **HEVC/H.265, MPEG4 AVC/H.264 video encoding format**
- **Support B frame GOP, high video compression ratio and stable bitrate**
- **MPEG-1 Layer 2, LC-AAC, HE-AAC and HE-AAC V2 audio format, AC3 Passthrough**

1 ASI output (optional) as mirror of MPTS

- IP output over UDP and RTP/RTSP protocol
- **Support QR code, LOGO, closed caption insertion.**
- Support “Null PKT Filter” function
- Support PID Remapping/ PCR accurate adjusting
- Control via web management, and easy updates via web

Principle Chart



Technical specification

Input	8/12/16/20/24 HDMI inputs		
Video	Resolution	input	1920×1080_60P,1920×1080_50P, 1920×1080_59.94P,1920×1080_60i, 1920×1080_50i, 1920×1080_59.94i, 1280×720_60P, 1280×720_59.94P, 1280×720_50P
		Output	1920×1080_60P , 1920×1080_50P, 1920×1080_30P,1920×1080_25P, 1280×720_60P, 1280×720_50P
	Encoding		MPEG-4 AVC/H.264, HEVC/H.265
	Bit-rate		1~15Mbps for each channel
	Rate Control		CBR/VBR
	GOP Structure		IP, IBBP, IBBBP

Audio	Encoding	MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough
	Sampling rate	48KHz
	Bit-rate	48Kbps~384Kbps (MPEG-1 Layer 2 & LC-AAC) 24 Kbps~128 Kbps (HE-AAC) 18 Kbps~56 Kbps (HE-AAC V2)
Multiplexing	Maximum PID Remapping	180 output PIDs per channel
	Function	PID remapping (automatically or manually) Accurate PCR adjusting
Stream output	IP output thru Data1 (GE) and Data2 (FE) over UDP and RTP/RTSP protocol 8/12/16/20/24 SPTS and 1MPTS output (unicast/ multicast) ASI output as copy of MPTS (optional)	
System function	Network management (WEB)	
	Chinese and English language	
	Ethernet software upgrade	
Miscellaneous	Dimension (W×L×H)	482mm×410mm×44mm
	Environment	0~45℃(work); -20~80℃ (Storage)
	Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz

OSD (Logo/ Caption/QR Code) Insertion

LOGO Insertion

- Support jpg/jpeg/bmp/gif/png file
- Support multi pictures compressed into a zip file and display pictures in a dynamic way
- Custom time table of appear and disappear
- Custom transparency *DEING*
- Drag to move to any position



Transparent background (hollow out) with png/gif type picture



White background with jpg/jpeg/bmp type picture

Caption Insertion

- Multi languages: Chinese, English, Thai, Arabic, Indian, Korean, Japanese...
- Custom font family/ color/size/weight
- Custom running speed
- Custom showing period and text length
- Custom background, transparency or any color
- Custom time table of appear and disappear
- Drag to move to any position

QR Code Insertion

- Input URL and create immediately
- Support add text at top or bottom
- Custom transparency/ size: 40*40 -- 400*400
- Support add logo at the center
- Custom time table of appear and disappear
- Drag to move to any position

Technical Comparison

	NDS3542L	NDS3542LU
Chipset	Hisilicon (Old)	Hisilicon (New)
Video Format	MPEG-4 AVC/H.264	MPEG-4 AVC/H.264, HEVC/H.265
Video Bit Rate	1~13Mbps each channel (Bit rate is with a high fluctuation, suitable for cable system, not suitable for satellite uplink)	1~15Mbps each channel (Bit rate is stable)
GOP	IP...P (P Frame adjustment, without B Frame)	IP, IBBP, IBBBP
Output Resolution	1920×1080_30P, 1920×1080_25P, 1280×720_30P, 1280×720_25P	1920×1080_60P, 1920×1080_50P, 1920×1080_30P, 1920×1080_25P, 1280×720_60P, 1280×720_50P
Audio Encode	MPEG-1 Layer 2	MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough
Audio Gain	0-255 Adjustable	N/A
IP output	SPTS and 1MPTS (for 8/12 channel) SPTS or 1MPTS alternative (for 16/20/24 channel)	SPTS and 1MPTS (for 8/12/16/20/24 channel)

Order Information

	NDS3542LU-8	NDS3542LU-12	NDS3542LU-16	NDS3542LU-20	NDS3542LU-24
8 HDMI Inputs with 8 SPTS and 1 MPTS out	✓				
12 HDMI Inputs with 12 SPTS and 1 MPTS out		✓			
16 HDMI Inputs with 16 SPTS and 1 MPTS out			✓		
20 HDMI Inputs with 20 SPTS and 1 MPTS out				✓	
24 HDMI Inputs with 24 SPTS and 1 MPTS out					✓

Updated Date: 29 October, 2019