

# SOFTTEL

## SFT3224HS Multi-Channel Encoder



- ◆ **Video Encoding:** HEVC/H.265 & MPEG 4 AVC/H.264
- ◆ **Audio Encoding:** MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough
- ◆ **Ultra Low Bitrate**
- ◆ **OSD (Logo, Caption, QR Code) insertion**



**B frame(IBBP) GOP Structure**



**HDMI 1.4**



**Full HD 1080P**



**HDCP 1.4**



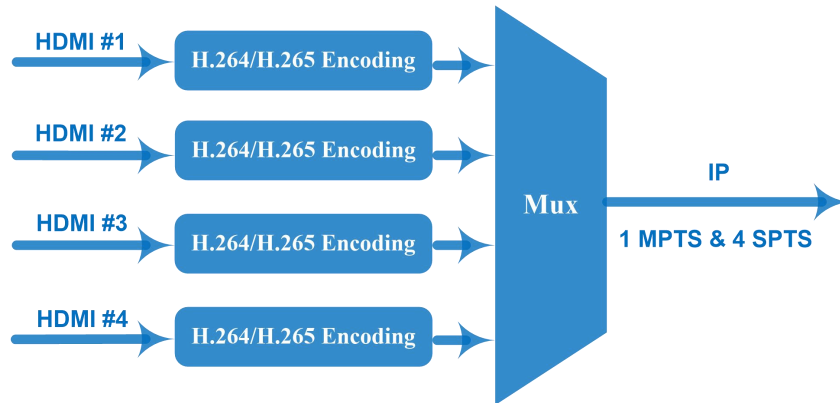
**Decoder/STB**

**STB Available with Ensurity CAS**

**Decoding Chipset: Montage CS8051**

**NationalChip GX3201H**

## Principle Chart of Per Module



## Technical Specification

<b>Input</b>	4/8/12×HDMI(1.4) input for option, HDCP 1.4	
<b>Video Encoding</b>	Encoding Format	HEVC/ H.265 , MPEG 4 AVC/H.264
	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
	Chroma	4:2:0
	Bitrate	1Mbps~15Mbps (each channel)
	Rate Control	CBR/VBR
	GOP Structure	IBP, IBBP, IBBBP, IPPP
Advanced Pretreatment	Noise reduction	
<b>Audio Encoding</b>	Encoding Format	MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough (optional)
	Sampling rate	48KHz
	Bit-rate (each channel)	48Kbps~384Kbps (MPEG-1 Layer 2 & LC-AAC) 24 Kbps~128 Kbps (HE-AAC) 18 Kbps~56 Kbps (HE-AAC V2)
<b>Stream output (per module)</b>	1 MPTS and 4 SPTS output over UDP/RTP, Base-T Ethernet interface (1000M/100M self-adaption) (unicast/ multicast) IP null packet filter	
<b>System</b>	Web based management	
	Chinese-English control interface	
	Ethernet software upgrade	
<b>Miscellaneous</b>	Dimension (W× L× H)	482mm×328mm×44mm
	Approx weight	5kg
	Temperature	0~45℃(work), -20~80℃ (Storage)
	Power	AC 100V-220V±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 **SOFTEL®**
- 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

	SFT3224V-HDMI	SFT3224V-SDI	SFT3224H	SFT3224HV	SFT3224HS
<b>Input Interface</b>	4/8/12*HDMI	4/8/12*SDI	4/8/12*HDMI		4/8/12*HDMI
<b>Video Encoding</b>	H.265, H.264	H.265, H.264	H.265, H.264	H.265	H.265,H.264
<b>Audio Encoding</b>	MPEG-1 Layer 2, LC-AAC, HE-AAC, HE-AAC V2, AC3 Passthrough				

<b>Input Resolution</b>	H.265	3840x2160P@30*2CHs 1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs 1920x1080I@50/60*4CHs	1920x1080P@50/60*4CHs 1920x1080I@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1920x1080I@50/60*4CHs 1280x720P@50/60*4CHs
	H.264	3840x2160P@30*1CH 1920x1080P@50/60*2CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*2CHs 1920x1080I@50/60*2CHs 1280x720P@50/60*4CHs	(SFT3224HV only supports H.265)	1280x720P@50/60*4CHs
<b>Output Resolution</b>	H.265	Same as input resolution	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1280x720P@50/60*4CHs	1920x1080P@50/60*4CHs 1920x1080P@25/30*4CHs
	H.264		1920x1080P@50/60*2CHs 1280x720P@50/60*4CHs	(SFT3224HV only supports H.265)	1280x720P@50/60*4CHs
<b>OSD</b>		N/A	N/A	Optional as per order	Support
<b>Caption Language</b>		N/A	N/A	Not support caption	Support multi languages

**Note:** “CH” means encoding channel, different encoding format can encode different channel with different resolution.