4 Channel Video Decoder and 5 Channel Audio Codec

Description

mP2807 includes 4 Channel Video Decoder and 5 Channel Audio Codec.

4 Channel Video Decoder delivers high quality images. It accepts separate 4 CVBS inputs from Camera, TV, VCRand the other video signal sources. It digitizes and decodes NTSC/PAL/SECAM video signal into digital componentsvideo which represents 8-bit CCIR656 4:2:2 format with 27 MHz, 54MHz and 108 MHz multiplexed.

5 Channel Audio Codec has five ADC and one DAC. Built-in voice controller can generate digital outputs for recording/mixing and accepts digital input for playback.

Features

Video Decoders

- High performance adaptive 4H comb filters for all NTSC/PAL/SECAM standards.
- Integrated four video analog anti-aliasing filters and 10 bit CMOS ADCs.
- Supports the standard ITU-R BT.656 format or time multiplexed output with 54/108MHz.
- Provides simultaneous two channel Full D1 and CIF time-multiplexed outputs with 54MHz.
- On Chip Analog DC-restore/AGC .
- Supports NTSC – M/J/4.43, PAL – I/B/G/H/D/N/M/60, SECAM standards.
- Automatic white peak control and peak AGC.
- Color Transient Improvement (CTI).
- Luminance Transient Improvement (LTI).
- Programmable hue, saturation, contrast, brightness.

- Built-in 2D sharpness.
- Video output mask.
- Motion detection.
- Weak signal handling.

Audio Codec

- Integrated 5 CH audio input and one audio DAC.
- Provides multi-channel audio mixed analog output.
- Supports a standard I2S interface for record output and playback input.
- I2S/DSP Interface (Master/Slave mode).
- Linear PCM (8/16 bit, 8/16/32/48KHz).
- Input/Output analog gain control.
- Cascade mode (up to 4 cascade support).
- Mute Detection.

Miscellaneous

- Supports a I2C-bus serial interface.
- Internal PLL for audio record and playback.
- 3.3V , 1.8V power.
- 80-pin LQFP(14x14mm, RoHS) package.
- Low Power consumption.

Applications

- Video Security System.