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intersil.com/products/TW2867

TW2867

4-Channel Video Decoders and Audio Codecs for Security Applications
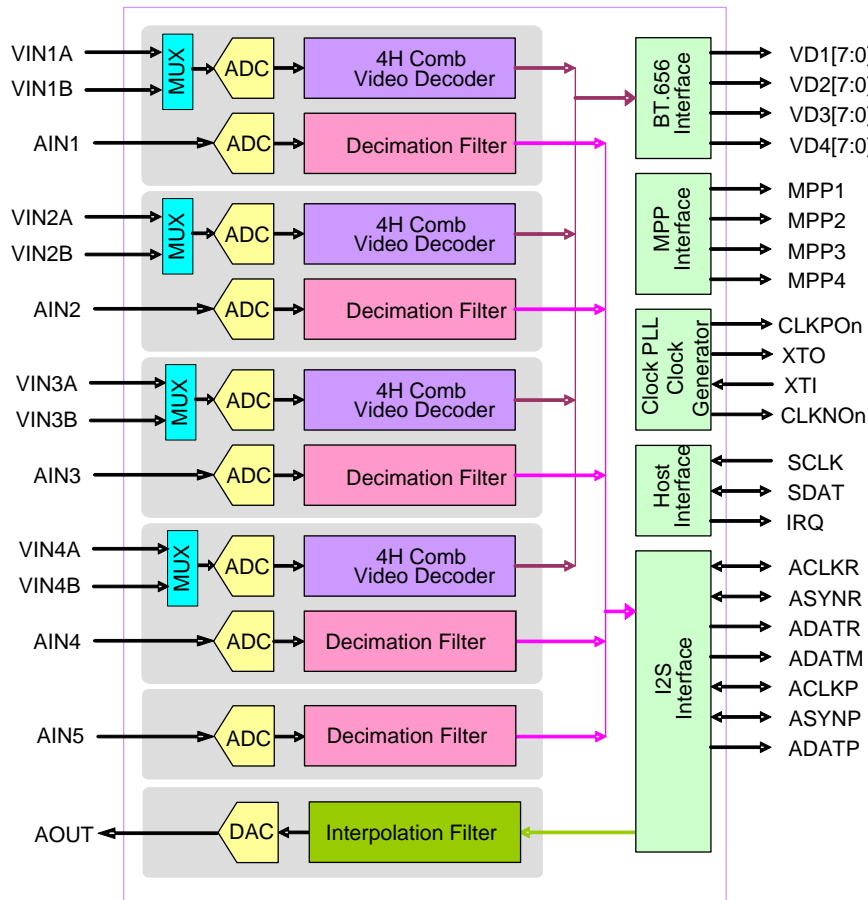
FN7748
Rev. 0.00
December 8, 2010

The TW2867 includes four high quality NTSC/PAL/SECAM video decoders that convert analog composite video signal to digital component YCbCr data for security applications. Each channel contains 10-bit ADC and proprietary clamp and gain controllers and utilizes 4H comb filter for separating luminance and chrominance to reduce cross noise artifacts. The TW2867 adopts the image enhancement techniques such as IF compensation filter, CTI and programmable peaking. The TW2867 also includes audio CODEC, which has five audio analog-to-digital converters and one digital-to-analog converter. A built-in audio controller can generate digital outputs for recording/mixing and accepts digital input for playback.

Features

- Accepts all NTSC (M/4.43) / PAL (B/D/G/H/I/K/L/M/N/60)/SECAM standards with auto detection

- Integrated four video analog anti-aliasing filters and 10-bit CMOS ADCs

- High performance adaptive 4H comb filters for all NTSC/PAL standards

- IF compensation filter for improvement of color demodulation

- Color Transient Improvement (CTI)

- Automatic white peak control

- Programmable hue, saturation, contrast, brightness and sharpness

- Proprietary fast video locking system for non-realtime application

- Supports the standard ITU-R BT.656 format or time multiplexed output with 54/108MHz

- Provides simultaneous four channel full D1 and CIF time-multiplexed outputs with 54MHz

- Integrated five audio ADCs and one audio DAC

- Provides multichannel audio mixed analog output

- Supports I2S/DSP master/slave interface for record output and playback input

- PCM 8-/16-bit and u-Law/A-Law 8-bit for audio word length

- Programmable audio sample rate that covers popular frequencies of 8/16/32/44.1/48kHz

- Supports a two-wire serial host interface

- Integrated clock PLL for 108MHz clock output

- Ultra low power consumption (typical 431.88mW)

- 128 pin LQFP package

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Block Diagram