### imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **inter<sub>sil</sub>**

OBSOLETE PRODUCT RECOMMENDED REPLACEMENT PARTS TW2867C, TW2984, TW2964, TW2965

To request the full datasheet, please visit <u>www.intersil.com/products/TW2867</u>

# **4-Channel Video Decoders and Audio Codecs for Security Applications**

### TW2867

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.

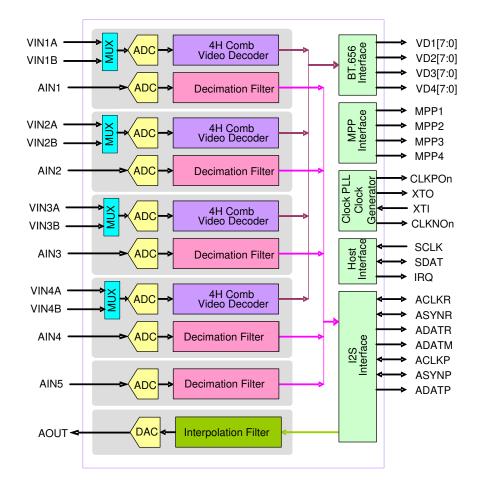
#### **Features**

- 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

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- 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

#### **Block Diagram**



All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9001 quality systems.

Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality.

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