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Security Surveillance IC Solutions

TECHWELL SECURITY

Features

TW2804

4-in-1 NTSC/PAL Video Decoder
for Security Applications

Target Applications

- Quad/Mux Systems
- 4ch/8ch/16ch DVR

Four Video Decoders

- Accepts all NTSC (M/N/4.43) / PAL (B/D/G/H/I/K/L/M/N/60) standard formats with auto detection
- Four 10-bit video CMOS analog to digital converters
- Adjust video level with proprietary automatic clamp and gain control
- Proprietary architecture for locking to weak, noisy, or unstable signals
- High performance adaptive comb filters for all NTSC/PAL standards
- IF compensation filter for improvement of color demodulation
- PAL delay lines for correcting PAL phase errors
- Programmable hue, saturation, contrast, brightness and sharpness
- Dual high quality horizontal and vertical down scaler for each channel
- Four built-in motion detectors for security system
- Supports the standard ITU-R BT.656 / 8bit ITU-R BT.601 format
- Supports two differently scaled output mode with 54MHz ITU-R BT.656 format
- Supports a two-wire serial or parallel interface
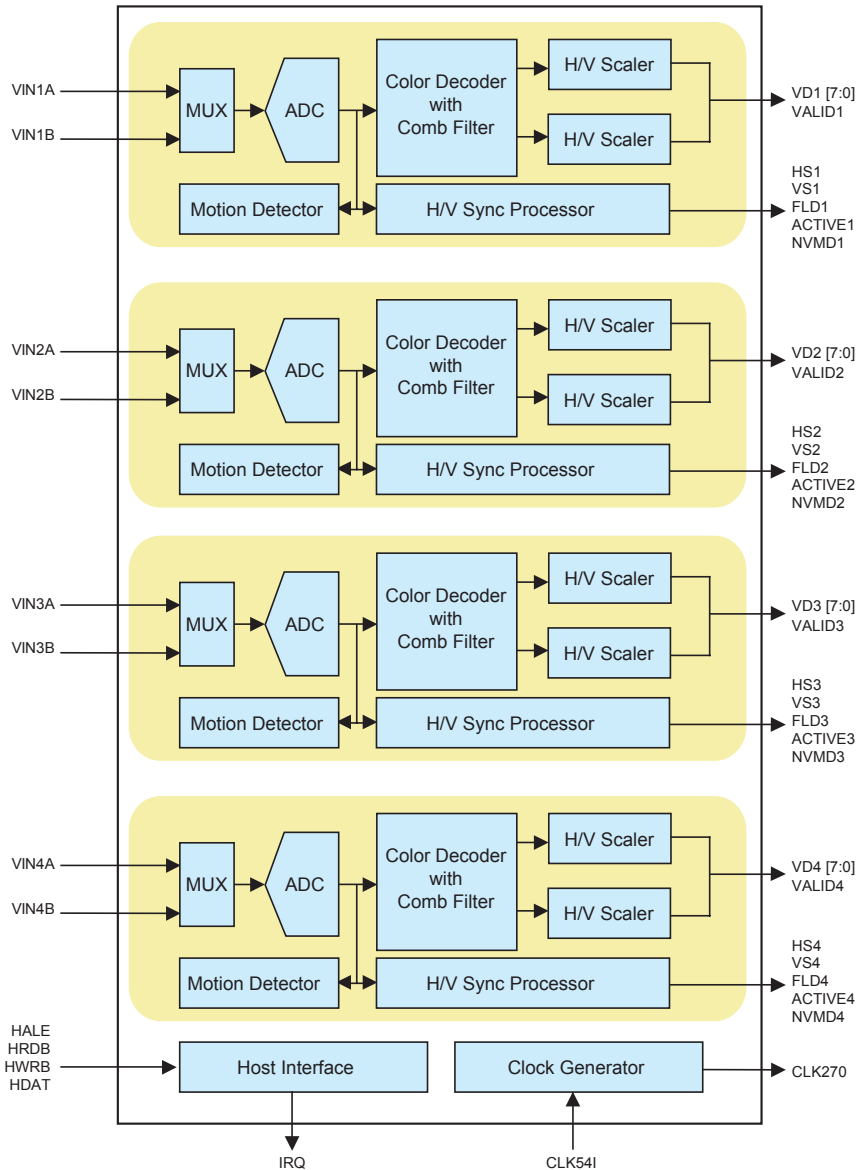- Low power consumption
- 128 PQFP package

The TW2804 includes four high quality NTSC / PAL video decoders, which convert analog composite to digital component YCbCr for security applications. The TW2804X contains four 10-bit A/D, proprietary digital gain/clamp controllers, and utilizes proprietary techniques for separating luminance & chrominance to reduce both cross-luminance and cross-chrominance artifacts. The high performance dual scalers in each channel offer two differently scaled video outputs with 54MHz ITU-R BT.656 format for security system design. Four built-in motion detectors can also increase the feature of a security system.

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TW2804 Block Diagram

About Techwell

Techwell designs and sells mixed signal semiconductor solutions for digital video applications. The company's products enable the conversion of analog video sources to digital form and facilitate the display, storage and transport of digital video, HDTV, and personal computer display information. Headquartered in San Jose, CA, Techwell currently has over 60 employees in the U.S., Korea, and Taiwan.

For more information on Techwell, please contact us at 1-408-435-3888

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