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Security Surveillance IC Solutions

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
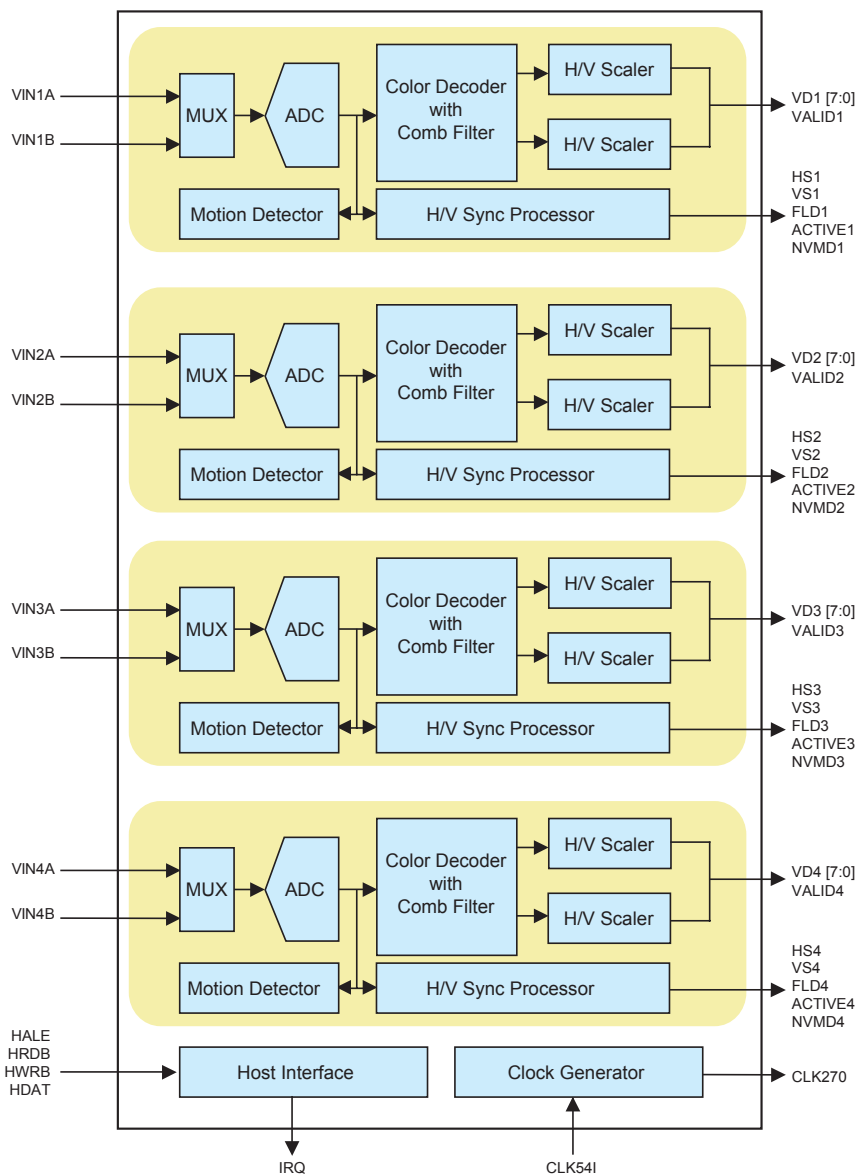
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