

4-Channel PCI Express Video/Audio Decoder with Stereo Audio

Features

- High Quality Live 4 channels video and audio decoder with proprietary 60 mV weak composite signal recovery, 5H adaptive comb filter and Smart Sink-Tip technologies for weak, noisy, or unstable signals and enables 500 meter cables connection
- Accepts NTSC(M,J), NTSC 4.43, PAL (B, D, G, H, I, M, Nc) and PAL60 with 27.0 MHz reference clock
- High quality H/V scaler with arbitrary scale-down up to 1/16 independently for each dimension
- Supports YUV 422/411 (Planar/Packed) and RGB (32/24/16/15) outputs
- Independent odd/even field video processing (Cropping/Scaler/Formatter control)
- 4 channels stereo audio input simultaneously with standard 16/18 bit width stereo I2S output - 44.1/48 KHz sampling rates
- High-speed 10-bit ADC and independent channel controls
- 16 bits High Order Sigma-Delta Modulation ADC with 80 dB SNR
- 1-port PCI Express Gen 1 Interface
- Two-wire serial interface(I2C) for brightness, contrast, saturation, hue, and sharpness control configuration
- Automatic gain control (AGC) for the best signal-to-noise performance
- Programmable field/frame decimation and cropping function

- Smart power management for the low power operation
- Optional BT.656 video outputs at 27, 54 and 108 MHz with Byte-interleaved format
- Packages: 128-contact LQFP

Description

The PI7C9X9204 is an PCIe Gen 1 integrated single-chip solution that supports Live 4 channels composite video and audio decoder. Pericom's proprietary technologies of Sink-Tip, weak signal recovery and 5H comb filter enable to support 500~700 meter single cable connection with the most cost-effective solution. High-speed 10-bit ADC and independent channel control with standard I2S audio output is another advantage of this product for the media broadcasting, industrial and military surveillance devices.

Application

- PCIe-based embedded DVR
- Video analytic system
- Video broadcasting server

Block Diagram

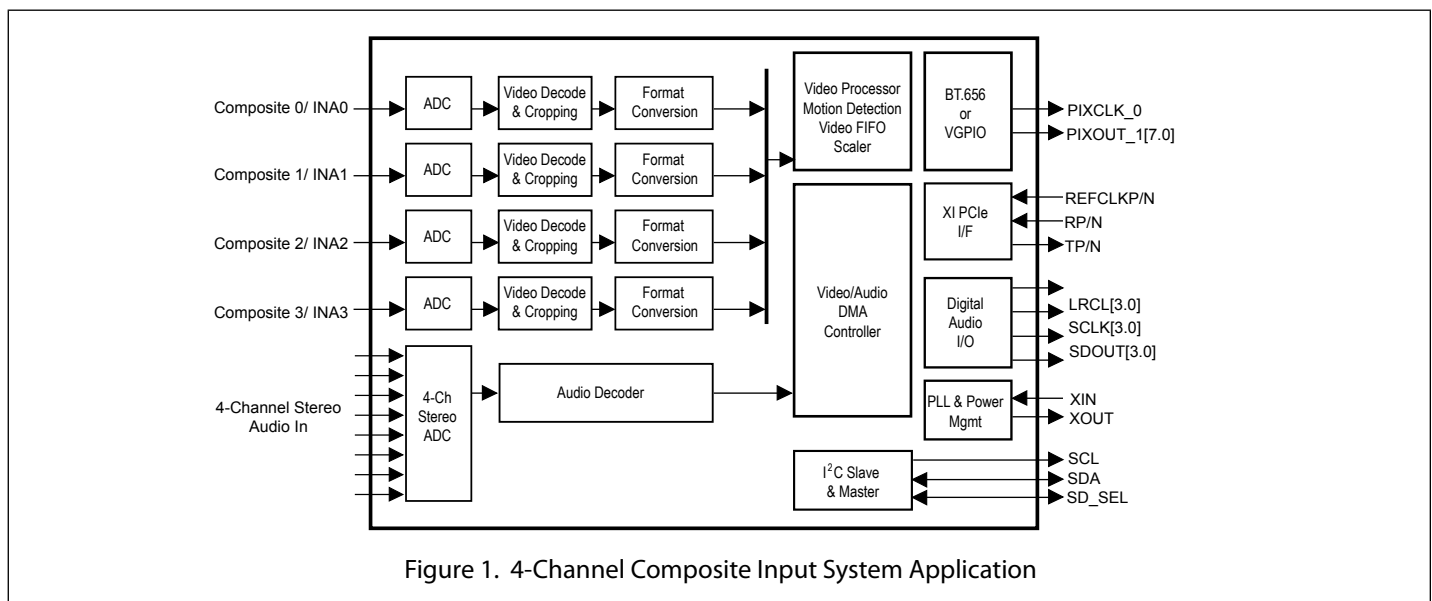


Figure 1. 4-Channel Composite Input System Application

Ordering Information

Ordering Code	Package Code	Package Type
PI7C9X9208FDIE	FDI128 (EPad)	128-pin LQFP, Industrial Temp, Pb-free & Green

Notes:

1. Thermal characteristics can be found on the company web site at :
<https://www.pericom.com/support/packaging/packaging-mechanicals-and-thermal-characteristics/>
2. "E" = Pb free and Green, adding an "X" suffix = Tape/Reel

Related Products

Part Number	Product Description
PI7C9X99204S	4-Channel PCIe Video Decoder with Stereo Audio, Industrial Application Support
PT7M8206	LDO Regulator

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