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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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## 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

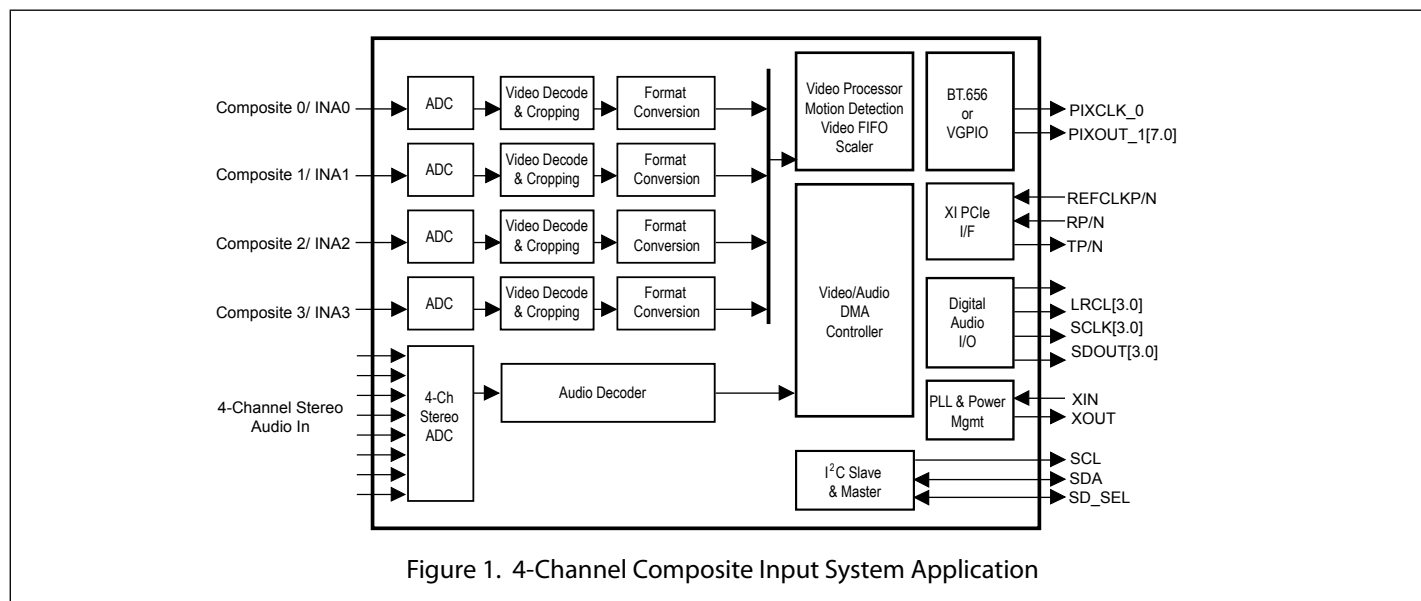
### Description

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



## 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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