New Product Brief

PERICOM®

PI7VD9008ABH
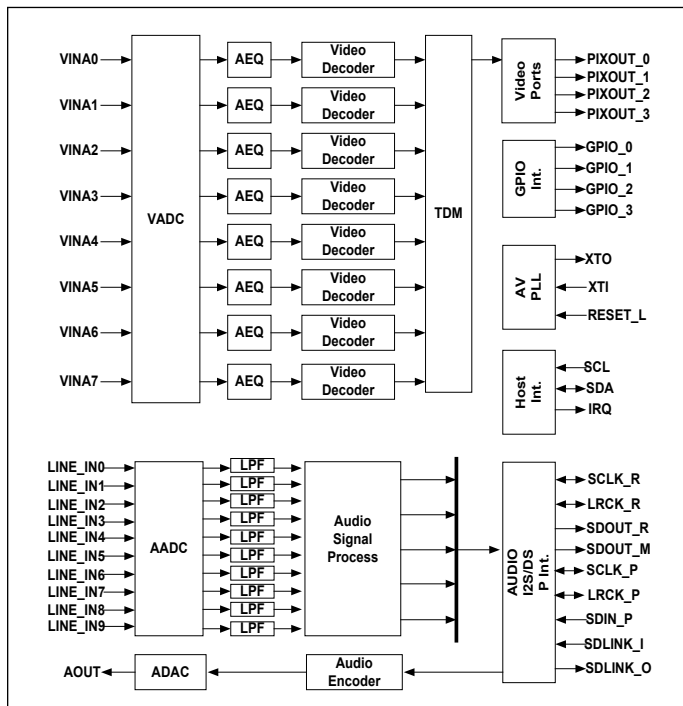## Adaptive EQ 8-Channel 960H Video Decoder

Description

The PI7VD9008ABH is an AEQ 8-Channel Video Decoder and Audio Codec. A built-in Adaptive equalizer (AEQ) recovers the noisy signals caused by long or small wire gauge Coax cables and displays the best picture image view quality. The video decoder converts NTSC, PAL analog composite video broadcasting signal (CVBS) into digital components YCbCr for video controller or processor to perform preview, compression and storage etc. The converted digital video streams complying with ITU-R BT.656 are transported in time multiplexed format, which contains one, two or four video channels.

Single 27MHz reference crystal clock support NTSC, PAL and 960H standard resolution. Each video channel contains 10-bit ADC, proprietary clamp, automatic gain controller and 5H comb filter for separating luminance & chrominance to reduce artificial noise.

Application

➔ Video Security Analog Type DVRs

➔ Automotive Camera Driver Assistant Systems

➔ Video Capture Cards

Application Diagram

Features

➔ Real time AEQ 8-channel Video/Audio decoder for WD1(960H) and D1 cameras

➔ Built-in Adaptive Equalizer(AEQ) for the best picture image in the several hundred meter coax cable condition

➔ Proprietary Pericom AEQ technology recovers weak, noisy, or unstable analog input signals

➔ Resilient SYNC TIP detection to lock video signal in a noisy environment

➔ Programmable sharpness, Chroma Transient Improvement (CTI), hue, saturation, contrast and brightness

➔ Support time multiplexed format of ITU-R BT.656 output with 54/108MHz or72/144MHz

➔ Provides programmable mapping from four or eight (non-real-time) analog video inputs to four BT.656 digital outputs

➔ NTSC(M), NTSC 4.43, PAL (B, D, G, H, I, M, Nc, 60) standard support

➔ High performance 5H comb filter for all NTSC/PAL standards

➔ Built-in 10-bit audio Codec to allow 10 analog audio inputs and 1 audio output

➔ Mixed audio analog output for multiple audio channels

➔ Two serial audio formats (I2S and DSP) are supported for recording/mixing output and playback input

➔ Selectable Master and Slave serial audio interface

➔ Multiple audio sample rates for 8, 16, 32, 44.1, 48KHz audio frequency

➔ Integrated video PLL for 108MHz, 144MHz clock output

➔ Two-wire serial interface(I2C) for register access

➔ Industrial grade temperature support (-40°C ~ 85°C)

➔ Packages:128-pin LQFP