# **inter<sub>sil</sub>**

# Multichannel H.264 Audio/Video Codec

### TW2809C

## **Features**

TW2809C is a high performance and cost effective multi-channel H.264 codec solution designed for security surveillance market. It is capable of encoding and decoding maximum 8 channels standard definition (SD) video in real time. It can do high definition (HD) 1080x60i encode or decode at real time too. Each video channel can be independently controlled in terms of encode / decode mode, frame rate, bit rate, and resolution. TW2809C is an ideal H.264 codec candidate for different DVR platforms such as 16CH SD or 16CH CIF.

#### **Video Features**

- Real time full-duplex video codec compliant to H.264 main profile standard
- Supports real time full duplex 9 channel SD encode and/or decode
- Supports CIF JPEG or H.264 network stream encode
- Supports CBR and VBR
- Four video input ports compliant to BT.656 up to 108MHz
- Four video output ports compliant to BT.656 up to 108MHz
- Two video input ports compliant to BT.1120 at 74.25MHz
- Two video output ports compliant to BT.1120 at 74.25MHz

#### **Audio Features**

- Real time 16 channel encode and 1 channel decode compliant to ADPCM standard.
- Independent digital audio input and output I/F compliant to  $I^2S$  standard
- Audio sample rate from 8kHz to 48kHz

#### **Peripheral I/F**

- External 16-bit DDR2 SDRAM @ 400MHz
- 32-bit PCI target for host communications @ 33/66MHz

#### **Operating Voltage**

- 1.2V for core
- 3.3V for I/O pad
- 1.8V for DDR2 DRAM I/O

#### Physical

- PBGA-320, 27mmx27mm, 1.27mm lead pitch
- 1.2W power consumption

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