


Decoder 144-Pin TQFP Tray

Manufacturer:	Renesas Technology Corp
Package/Case:	TQFP144
Product Type:	Discrete Semiconductor Modules
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The TW6869 is a highly integrated solution that supports multi-channel video and audio capture via PCIe x1 interface for PC DVR system and video analytic application. It contains high quality eight-channel NTSC/PAL/SECAM video decoders that convert analog composite video signal to digital component YCbCr data, and utilize adaptive 4H comb filter for separating luminance and chrominance to reduce cross noise artifacts. TW6869 contains a high performance proprietary DMA controller that fully optimizes the utilization of PCIe x1 bandwidth and enables it to transfer video and audio data at a high throughput rate that closely approaches the theoretical limit of PCIex1 interface. TW6869 is able to simultaneously decode and transfer 8 real time D1 video, or up to 32 channel non-real time D1, plus 8 channel audio. TW6869 decreases the complexity and workload of client-side software development, and significantly reduces the strains on PC hardware and resources. TW6869 also includes a software development kit (SDK) with Windows and Linux compliant drivers and reference application software.

Key Features

Accepts all NTSC(M/N/4.43) / PAL(B/D/G/H/I/K/L/M/N/60) standards with auto detection

Integrated eight video analog anti-alias filters and 10-bit CMOS ADCs

IF compensation filter for improvement of color demodulation

Color Transient Improvement (CTI)

White peak AGC control

Programmable hue, saturation, contrast, brightness and sharpness

High quality proprietary fast video locking system for non-real-time application

High performance adaptive 4H comb filters for all NTSC and PAL standards

Integrated eight audio ADCs

8/16 bit audio word length

Sample audio with 8/16/32/44.1/48kHz

Highly-efficient DMA design can support up to 8 real time D1 video and 8 real time audio channels, or up to 32 non-real-time video with optimization of full PCIe1 bandwidth

Multiple video format output support: UYVY/Y422, YUYV/YUY2, IYUI/Y411, Y41P, YUV420, RGB555 and RGB565

Integrated internal video and audio generator simplifies system test and development

Built-in motion detection engine for each video channel

Hardware-friendly design enables smooth data transfer and virtually eliminates unwanted big-block data jamming among PC devices, resulting in optimized PC internal bandwidth consumption

PCI Express Base Specification 1.1 Compliant

Flexible PCIe packet size configuration: 128 byte, 256 byte and 512 byte options

Recommended For You

TW8834-TA2-CR

Renesas Technology Corp

QFP100

TW2837-PB1-GE

Renesas Technology Corp

QFP208

TW8844-LB1-CE

Renesas Technology Corp

LQFP-156

TW2871-BB1-CR

Renesas Technology Corp

BGA

TW8824-TA1-CR

Renesas Technology Corp

QFP

TW8824-TA1-CRT

Renesas Technology Corp

199-TQFP

TW5866-BA2-CR

Renesas Technology Corp

BGA

TW8844AT-LB1-GET

Renesas Technology Corp

LQFP-156

TW2984-NA2-CR

Renesas Technology Corp

QFN68

TW8844AT-LB1-GE

Renesas Technology Corp

LQFP-156

TW8845AT-LB1-GE

Renesas Technology Corp

QFP

TW2828-BA2-CR

Renesas Technology Corp

BGA

TW8845-LB1-CE

Renesas Technology Corp

LQFP-156-EP(14x20)

TW8835AT-LA2-GRH

Renesas Technology Corp

LQFP128

TW8845AT-LB1-GET

Renesas Technology Corp

LQFP-156