M9207

USB2.0 Digital Video/Audio Device Controller



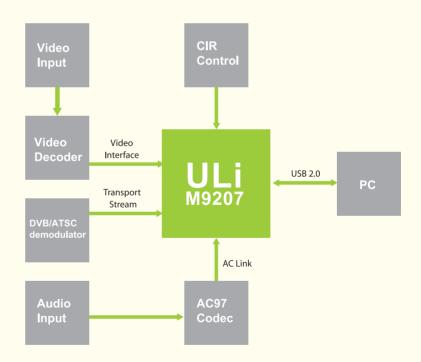
- Digital Serial/Parallel Transport Stream Interface for DVB/ATSC Standards
- High-speed 480 Mbits/s USB2.0 interface to the host systems
- Support ITU CCIR-656/601 YUV 4:2:2 format (8 bits) video input
- AC97-Link/l²S for audio control and audio data interfaces
- Integrated I²C-compatible Controller with data clock rate up to 400 kHz
- Built-in high-performance 8051-compatible micro-controller
- Support external E²ROM Interface up to 64K Bytes

Digital Cinematic Entertainment at your finger tips

The M9207 is a versatile digital and analog audio/video controller for various digital TV standards such as DVB and ATSC. In addition, its pin-to-pin compatibility with its predecessor M9205 and support for Microsoft's latest Broadcast Driver Architecture (BDA) offer customers design flexibility, broad market coverage to both DVB and ATSC standards, in-system programming (ISP) for firmware upgrades and improved time-to-market.

Supporting the industry standard ITU CCIR-656/601 YUV 4:2:2 format video input, ULi's M9207 incorporates AC97-Link and I² S interfaces that provide options for mono and stereo audio input. Featuring I²C, GPIO, consumer IR, and memory interfaces, ULi's M9207 provide various connectivities to enriched CE multimedia applications. In addition, its outstanding power management features make ULi's M9207 an ideal solution to convert any portable devices such as notebook PCs into full-function digital TV set.

M9207 System Block Diagram





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Features

USB Interface

- Supports HS (480 Mbits/s) or FS (12 Mbits/s) data transfer rates
- USB 2.0 and USB 1.1 Specifications compliant
- Compatible to Video and Audio Device Class
- · Supports USB 2.0 Control and Isochronous pipes
- USB 2.0 Isochronous video pipe up to 24 MBytes/s (HS mode only)
- USB 2.0 Isochronous/Bulk audio pipe up to 48 KBytes/s
- · Bus-powered or Self-powered

Video Interface

• Supports ITU CCIR-656/601 YUV 4:2:2 format (8 bits) video input

Audio Control and Audio Data Interfaces

- AC97-Link Interface
- I²S interface
- 16-bit, 2-channel mono/stereo

Digital TV Interface

• DVB/ATSC Transport Stream serial/parallel interface input

I²C Interface

Integrates I²C-compatible Controller running at 100 or 400 KHz.

Consumer IR Interface

• Receiver (Hardware support)

MCU

- Built-in high-performance micro-controller 8051 Engine
- 12 MHz clock rate
- 4 clocks/instruction core
- 2 integrated UARTs

Memory Interface

Address/Data bus for external E²ROM up to 64 Kbytes

Others

• 7 programmable general purpose input/output

Package

• 128-pin LQFP

